

# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

MEETING MATERIALS

April 2, 2009

CALTRANS

BAY AREA TOLL AUTHORITY

CALIFORNIA TRANSPORTATION COMMISSION















# Letter of Transmittal

**DATE:** March 25, 2009

**TO:** Toll Bridge Program Oversight Committee

(TBPOC)

**FR:** Program Management Team (PMT)

RE: TBPOC Meeting Materials Packet – April 2, 2009

Herewith is the <u>TBPOC Meeting Materials Packet</u> for the April 2<sup>nd</sup> meeting. The packet includes memoranda and reports that will be presented at the meeting. A <u>Table of Contents</u> is provided following the <u>Agenda</u> to help locate specific topics.



# TBPOC MEETING April 2, 2009, 10:00 am – 1:00 pm Conference Room 1906, Mission Bay Office, Pier 7, Oakland

	Topic	Presenter	Time	Desired Outcome
1.	CHAIR'S REPORT	W. Kempton, CT	3 min	Information
2.	CONSENT CALENDAR a. March 5, 2009 Meeting Minutes*	A. Fremier, BATA	1 min	Approval
3.	PROGRESS REPORTS  a. Draft March 2009 Monthly Progress Report**	A. Fremier, BATA	1 min	Information
4.	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES  a. Yerba Buena Island (YBI) Ramps 1) City of San Francisco Briefing*	T. Anziano, CT/ E. Cordoba, City of SF	30 min	Information
	<ul> <li>b. Yerba Buena Island (YBI) Detour</li> <li>1) Partial Demolition of Structures (Pier YB4 to Bent 48)*</li> </ul>	M. Forner, CT	30 min	Information
	2) Contract Change Order 65, S1 (Partial Demolition of Structures)*	D. Noel, CTC	10 min	Approval
	3) East Tie-In (ETI) 2009 Public Outreach Plan*	B. Ney, CT	30 min	Approval
	<ul> <li>c. Self-Anchored Suspension (SAS) Superstructure</li> <li>1a) TBPOC / ABF Mitigation and Acceleration Update</li> <li>1b) TY Lin/ Moffatt &amp; Nichol Process Enhancement Proposal</li> </ul>	PMT T. Anziano, CT	45 min 15 min	Information Information
	2) Contract Change Order 108 (Fabrication Schedule Recovery)*	D. Noel, CTC	10 min	Approval
5.	OTHER BUSINESS  a. SFOBB West Span Pathway PSR*	A. Fremier, BATA	5 min	Information

Next TBPOC Meeting: May 7, 2009, 10:00 AM – 1:00 PM Mission Bay Office, 325 Burma Road, Oakland

<sup>\*</sup>Attachments

<sup>\*\*</sup>Stand-alone document included in the binder

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# **TBPOC MEETING April 2, 2009**

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2	2	CONSENT CALENDAR  a. March 5, 2009 Meeting Minutes*	
3	3	PROGRESS REPORTS  a. Draft March 2009 Monthly Progress Report**	
4	4	<ul> <li>SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES <ul> <li>a. Yerba Buena Island (YBI) Ramps</li> <li>1) City of San Francisco Briefing*</li> </ul> </li> <li>b. Yerba Buena Island (YBI) Detour</li> <li>1) Partial Demolition of Structures (Pier YB4 to Bent 48)*</li> <li>1) Contract Change Order 65, S1 (Partial Demolition of Structures)*</li> <li>2) East Tie-In 2009 Outreach Action Plan*</li> <li>c. Self-Anchored Suspension (SAS) Superstructure</li> <li>1a) TBPOC / ABF Mitigation and Acceleration Update</li> <li>1b) TY Lin /Moffatt &amp; Nichol Process Enhancement Proposal</li> <li>2) Contract Change Order 108 (Fabrication Schedule Recovery)*</li> </ul>	
5	5	OTHER BUSINESS  a. SFOBB West Span Pathway PSR*	

<sup>\*</sup>Attachments
\*\*Stand-alone document included in the binder

# ITEM 1: CHAIR'S REPORT

No Attachments



# Memorandum

TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a

Consent Calendar

Item- March 5, 2009 Meeting Minutes

# **Recommendation:**

**APPROVAL** 

# **Cost:**

N/A

# **Schedule Impacts:**

N/A

# Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the March 5, 2009 Meeting Minutes.

# Attachment(s):

March 5, 2009 Meeting Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

### **MEETING MINUTES**

March 5, 2009, 1:00 PM – 4:00 PM Director's Conference Room 1102, N Street, Sacramento, CA

**Attendees**: TBPOC Members: Will Kempton Steve Heminger, and Andre Boutros

<u>PMT Members</u>: Tony Anziano, Andrew Fremier, and Stephen Maller <u>Participants</u>: Ade Akinsanya, Ali Banani, Bill Casey, Michele DiFrancia, Mike Forner, Beatriz Lacson, Rick Land, Peter Lee, Brian Maroney, Bart Ney, Dina Noel, Bijan Sartipi, Jon Tapping, Ken Terpstra, and Jason Weinstein <u>Part-Time Participants</u>: Bob Coupe (CCM), Dan Himick (CCM) and Dennis

Jang (TY Lin)

Convened: 1:09 PM

	Items	Action
1.	CHAIR'S REPORT	
	<ul> <li>Will Kempton, the Chair, welcomed Andre Boutros, who will act as CTC Interim Director until a permanent replacement is named for John Barna.</li> <li>The Chair noted that the State is still working to interpret and understand the federal stimulus package; they are in discussions with Federal agencies.</li> <li>California will receive approximately \$26B for government programs.</li> </ul>	
2.	CONSENT CALENDAR	
<b>~.</b>	<ul> <li>a. January 30, 2009 TBPOC Conference Call Minutes</li> <li>b. February 4, 2009 TBPOC Meeting Minutes</li> <li>c. Final Fourth Quarter Report, December 31, 2008</li> <li>d. Contract Change Orders (CCO's)</li> <li>West Approach Contract Change Order (CCO) 316 was presented for TBPOC approval: 1) CCO 316: \$5,524,900 to compensate the contractor for all</li> </ul>	The TBPOC APPROVED all consent calendar items.

	Items	Action
	non-overhead expenses associated with time extensions granted to the contract.	
3.	<ul> <li>PROGRESS REPORTS <ul> <li>a. Draft February 2009 Monthly Progress Report</li> <li>Andy Fremier reported that the PMT approved the January 2009 Monthly Progress Report, through delegated TBPOC authority, on February 10, 2009 and requested TBPOC confirmation of this approval.</li> <li>Andy Fremier also reported that the PMT approved the February 2009 Monthly Progress Report, through delegated TBPOC authority, on March 2, 2009 and requested TBPOC confirmation of this approval.</li> </ul> </li> </ul>	<ul> <li>The TBPOC confirmed the PMT authority to approve the January 2009 Monthly Progress Report.</li> <li>The TBPOC confirmed the PMT authority to approve the February 2009 Monthly Progress Report.</li> </ul>
4.	<ul> <li>a. TBSRP Capital Outlay Support (COS) Allocation – FY 2009/10</li> <li>Ali Banani and Peter Lee presented the COS allocation request of \$131.3 million for FY 2009/10. The presentation also covered Assumptions, Proposed Budget, Budget Breakdown, FY 09/10 Planned Dollars, and SAS – FY 09/10 Planned Dollars.</li> <li>Discussion/comments included: <ul> <li>The allocation amount requested is based on a preliminary State overhead rate for FY 09/10 and did not consider the effect of the State furloughs.</li> <li>A 10% reduction of the requested allocation adjusted for overhead and furloughs was suggested.</li> <li>It was noted that while there are sufficient funds in the corresponding COS budgets for the OTD and YBITS projects to cover next year's allocation, it is</li> </ul> </li> </ul>	• The TBPOC <b>APPROVED</b> the requested COS allocation with the following modifications: 2) apply the final State overhead rate; 3) include the impact of State furloughs; and 4) reduce the allocation, as

7.	
Items	Action
anticipated that TBPOC action to	adjusted, by 10%.
adjust the budgets for the YBI	
Detour and SAS projects would	
be required.	
1	
b. TBSRP Forecast Protocol	
Tony Anziano presented, for	
information only, a review of the	
TBSRP forecast process, which	
utilizes the forecast generated by the	
risk management effort.	
<ul> <li>It was noted that there is a</li> </ul>	
disinclination to update the	
reported risk management	
forecast due to the timing of	
some of the identified risks and	
ongoing efforts to manage future	
risks.	
<ul> <li>It was pointed out that while the</li> </ul>	<ul> <li>Make the monthly progress</li> </ul>
quarterly report reflects the risk	report consistent with the
management figures, the	quarterly report and reflect the
monthly progress report does	risk management figures.
	risk management figures.
not.	
<ul> <li>Further action on the forecast</li> </ul>	
process will be taken at a later	
TBPOC meeting for the next	
quarterly report.	
5. SAN FRANCISCO-OAKLAND BAY	
BRIDGE UPDATES	
a. Yerba Buena Island Detour (YBID)	
1) Contract Change Order (CCO)	
129, S1	
Tony Anziano presented, for	<ul> <li>The TBPOC APPROVED CCO</li> </ul>
TBPOC approval, CCO 129 –	129 -S1 (\$1,712,000), as
Supplement 1, in the amount of	presented.
	presenteu.
\$1,712,000 which breaks down to	
\$535,000 for acceleration costs	
and up to \$1,177,000 in	
monetary incentives to complete	
the erection and construction of	
the East Tie-In truss and	
associated metal decking by June	
19, 2009 or earlier, accelerated	
from the current date of July 24,	
2009.	
WUUU,	

Items	Action
2) East Tie-In (ETI) — C. C. Myers Discussion  • Dan Himick of C. C. Myers (CCM) reported that CCM is confident it will achieve a Labor Day weekend bridge closure for the ETI Roll-Out/Roll-In (RO/RI).  • The Chair expressed the TBPOC's appreciation for CCM's and staff's collaborative efforts to make the Labor Day weekend bridge closure a reality.  • Public Information Officer (PIO) Bart Ney noted that a lot more media attention than before is anticipated for this ETI RO/RI. National Geographic, for one, plans to develop more than one show on the operation.  • BATA is anticipating the need to raise tolls. It may also want to work on the mini-toll booths during the Labor Day weekend.  • When the demolition of the existing bridge was raised, Bob Coupe of CCM responded that a demolition package would be developed by next week and be ready for presentation to the TBPOC in April.  b. Self-Anchored Suspension (SAS) Superstructure 1) TBPOC/ABF Mitigation and Acceleration Update • Discussion/comments included: • All topics discussed at the December 2008 TBPOC/ABF Partnering Session remain open. • The shipping schedule continues to slip. In December '08, ABF reported	The Communications     Partnership Team (CPT) to     provide a briefing on the     outreach plan that enhances     promotion at the TBPOC April     meeting.

# (continued)

	Action
an April '09 shipping date for the first shipment. In early February this year, ABF reported a May '09 shipping date. In late February, Team China (in conjunction with ABF) forecast a July 22 shipping date.  The path we are on is not working adequately. We need to do something different, and the situation is calling for drastic measures.	The PMT to develop a range of options as to what can be done to make the process work better, for discussion in a workshop meeting, with or
<ul> <li>ABF has not responded to TBPOC request for alternatives for ABF to accelerate delivery of the SAS.</li> <li>Yerba Buena Island Transition Structures (YBITS) No. 1</li> <li>Update</li> </ul>	<ul> <li>The Chair to lead a TBPOC call to Bob Luffy to discuss getting together, ABF thoughts on partnering, and how to improve the process. The PMT to brief the TBPOC prior to this call.</li> </ul>
<ol> <li>Update</li> <li>Not discussed.</li> <li>YBITS No. 1 Addendum         (Contractor Outreach Event)</li> <li>Tony Anziano explained that an addendum is required to notify contractors of the date, time, and location of the second, mandatory outreach for the YBITS No. 1 contract, which is scheduled for April 23, 2009, and requested TBPOC approval of this addendum.</li> <li>The Chair noted that he was very supportive of such an outreach, which would be an effective tool to enhance small business participation and local community involvement.</li> <li>d. Oakland Touchdown (OTD) No. 1</li> </ol>	The TBPOC APPROVED the addendum, as presented.

# (continued)

Items	Action
<ul> <li>Update</li> <li>Tony Anziano reported that the project is going very well. While there may have been some setbacks early on, the contractor (MCM) has made an effort to manage the significant issues confronting the project.</li> </ul>	1101011
<ul> <li>e. West Approach <ol> <li>Excess Property</li> <li>Tony Anziano indicated that there is, potentially, \$18M in proceeds from the sale of two vacant properties and four live/work lofts previously purchased by the State for the West Approach Project, which would go back to the Toll Bridge Program.</li> <li>It was recommended that Unit T254 be auctioned off to test the current market. If it sells for more than \$400K, one loft per month for the next three months will be sold.</li> </ol> </li> </ul>	• The TBPOC did not object to the sale of Unit T254 to test the current market.
8 OTHER BUSINESS • N/A	

Adjourned: 2:54 PM

# **MEETING MINUTES**

 $March~5,~2009,~1:00~PM-4:00~PM\\ Director's~Conference~Room~1102,~N~Street,~Sacramento,~CA$ 

APPROVED BY:		
WILL KEMPTON, Director California Department of Transportation	Date	
ANDRE BOUTROS, Interim Director California Transportation Commission	Date	
STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date	



# Memorandum

TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

**RE:** Agenda No. - 3a

**Progress Reports** 

Item- Draft March 2009 Monthly Progress Report

# **Recommendation:**

For Information Only

## Cost:

N/A

# **Schedule Impacts:**

N/A

# Discussion:

Included in this packet is a draft March 2009 Monthly Progress Report, for your information. TBPOC approval of this report, through PMT delegation, is anticipated as soon as updated expenditure data and final comments are incorporated.

# Attachment(s):

Draft March 2009 Monthly Progress Report

# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

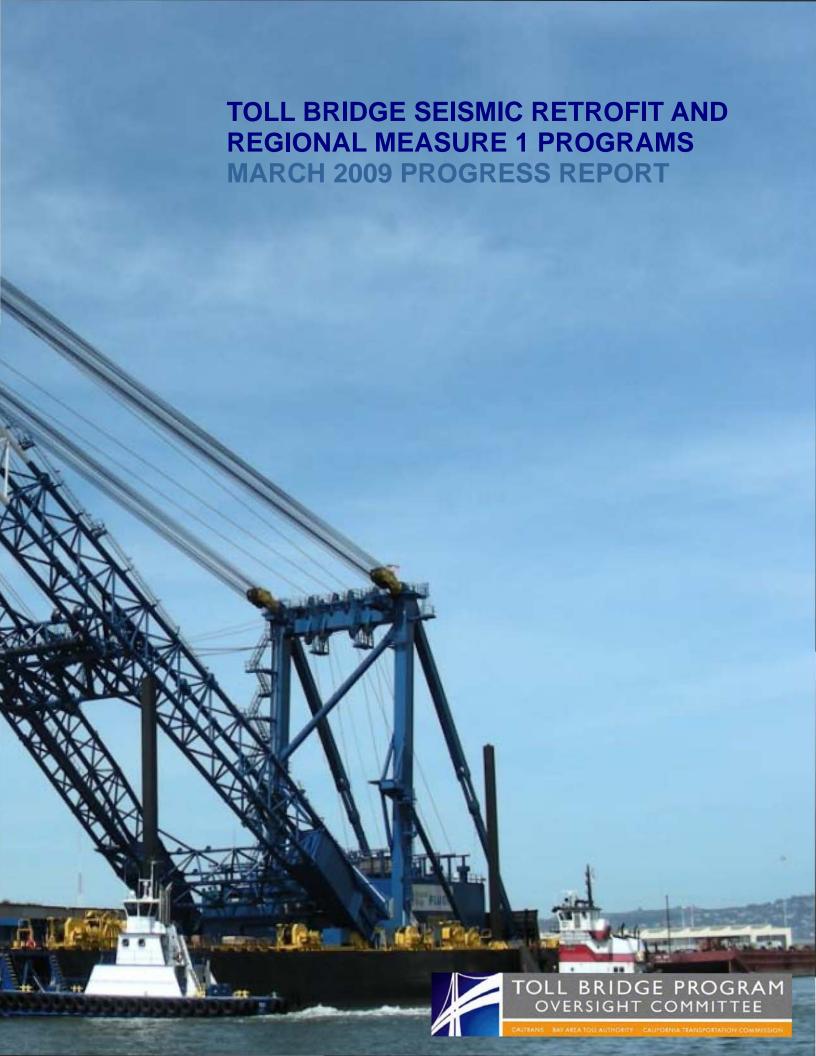
March 2009 Progress Report

DRAFT Version 7.0



Released: April 2009

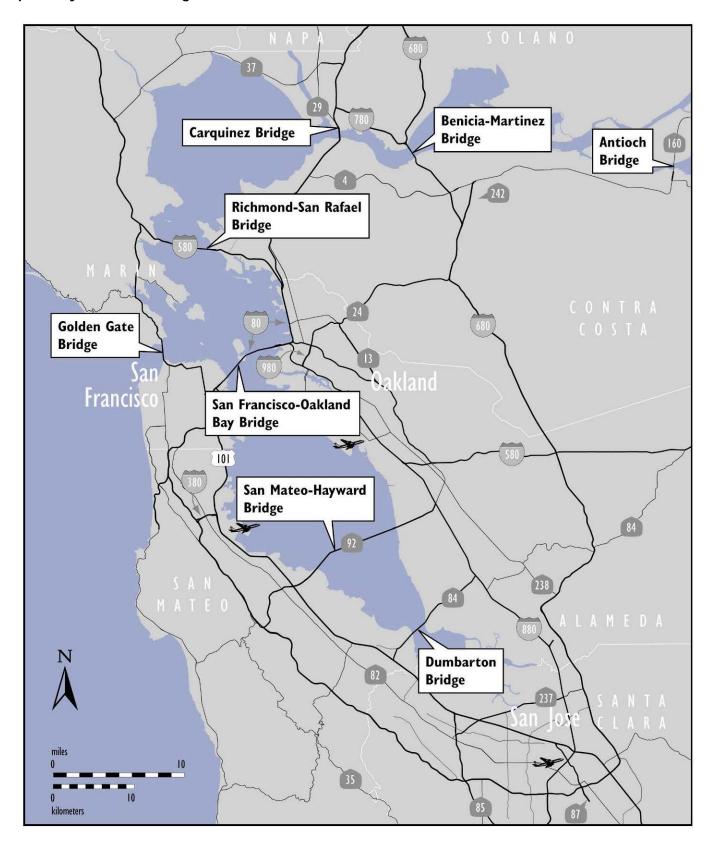




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# Map of Bay Area Toll Bridges



# Introduction

In July 2005, Assembly Bill 144, Hancock created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. Comprised of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission. the TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Eastbound Carquinez Bridge Seismic Retrofit	Complete
New Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans (CT) will continue to report on their progress as an informational item. The RM1 program includes:

RM1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
Old Benicia-Martinez Bridge Reconstruction	Construction
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

# SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



**SAS** Roadway Boxes in Fabrication

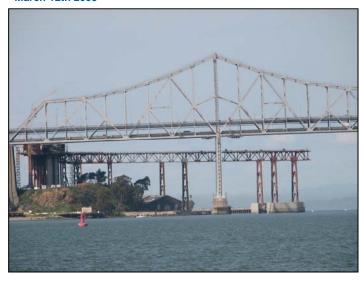
# San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project

The contractor for the Self Anchored Suspension (SAS) Bridge contract continues with steel fabrication for the bridge in China, and with installation of temporary support structures in the bay. Fabrication has fallen behind schedule, but has not yet affected the expected opening date of the bridge in 2013. The TBPOC and contractor continue to negotiate a schedule mitigation proposal for the contract to accelerate the work. Temporary support structures continue to be erected in the Bay. The shear leg crane barge arrived from China on March 12, 2009.



Shear Leg Crane Barge Arrived into San Francisco Bay on March 12th 2009

On the Yerba Buena Island Detour contract, the contractor continues to erect the detour structure that will divert traffic off the existing transition structures that tie the existing bridge with the Yerba Buena Island tunnel. The traffic switch scheduled for Labor Day Weekend 2009 and will require a full closure of the Bay Bridge over that entire weekend



**Temporary Support Structures for SAS Bridge Erection** 



Yerba Buena Island Detour Structure Under Construction



### Recently Reopened Harrison Street Off-ramp.

# SFOBB West Approach Seismic Replacement Project

Caltrans certified seismic safety on the San Francisco-Oakland Bay Bridge West Approach Seismic Replacement Project in December 2008 — eight months ahead of schedule. On February 9, 2009, Caltrans reopened the Harrison Street westbound off ramp from the Bay Bridge after being closed for over three years for construction. The contract was substantially completed in February 2009 with only final closeout and punchlist work remaining.



New Bicycle/Pedestrian Pathway on Benicia Martinez Bridge

# **New Benicia-Martinez Bridge Project**

On the Existing Benicia-Martinez Bridge Modification Contract, work to modify the old southbound I-680 bridge to add an additional traffic lane and bicycle/pedestrian lane is proceeding. Caltrans is forecasting the work to be completed two months ahead of schedule in October 2009.



New East Route 92 to North Interstate 880 Direct Connector Under Construction

# Interstate 880/State Route 92 Interchange Reconstruction Project

On the Interchange Reconstruction Contract, the new east Route 92 to North Interstate 880 direct connector structure (ENCONN) is nearing completion and is scheduled to open to detour traffic in mid-May pending weather. The ENCONN is the most critical flyover structure for relieving congestion in the corridor. However, ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

# **Executive Summary**

# Toll Bridge Seismic Retrofit Program - Cost (\$ Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/20/05)	Approved Changes	Current Approved Budget (11/2008)	Cost To Date (11/2008)	Cost Forecast* (11/2008)	At- Completion Variance	Cost Status
а	b	С	d	e = c + d	f	g	h = g - e	i
SFOBB East Span Replacement Project								
Capital Outlay Support		959.3	-	959.3	675.2	977.1	17.8	
Capital Outlay Construction								
Skyway	Construction	1,293.0	(38.9)	1,254.1	1,236.7	1,254.1	-	•
SAS E2/T1 Foundations	Restart	313.5	(32.6)	280.9	275.0	280.9	-	•
SAS Superstructure	Advertise	1,753.7	-	1,753.7	8.606	1,767.4	13.7	
YBI South/South Detour	Design/Const	132.0	310.2	442.2	265.5	461.2	19.0	
YBI Transition Structures	Design	299.3	(23.2)	276.1	-	276.1	-	•
* YBITS Contract No. 1	Design				-	214.3		
* YBITS Contract No. 2	Design				-	58.5		
* YBITS Contract No. 3 - Landscape	Design				-	3.3		
Oakland Touchdown		283.8	-	283.8	143.4	302.5	18.7	
* OTD Submarine Cable	Design				7.9	9.6		•
* OTD No. 1 (Westbound)	Design				135.5	226.5		•
* OTD No. 2 (Eastbound)	Design				-	62.0		•
* OTD Electrical Systems	Design				-	4.4		•
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	•
Stormwater Treatment Measures	Design	15.0	3.3	18.3	16.6	18.3	(17.2)	•
East Span Completed Projects	Ü	90.3	-	90.3	89.2	90.3		
Right-of-Way and Environmental Mitigation		72.4	-	72.4	39.1	72.4		•
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	
Total SFOBB East Span Replacement Project		5,486.6	215.5	5,702.1	3,348.2	5,730.0	27.9	
SFOBB West Approach Replacement	Construction							•
Capital Outlay Support		120.0	-	120.0	112.6	120.0	-	
Capital Outlay Construction		309.0	41.7	350.7	304.6	350.7	-	•
Total SFOBB West Approach Replacement		429.0	41.7	470.7	417.2	470.7	-	
Program Completed Projects	Complete							•
Capital Outlay Support		353.8	(7.0)	346.8	346.1	346.8		
Capital Outlay Construction		1,485.6	(90.5)	1,395.1	1,367.1	1,395.1		
Total Program Completed Projects		1,839.4	(97.5)	1,741.9	1,713.2	1,741.9	-	
Miscellaneous Program Costs		30.0	-	30.0	24.7	30.0	-	
Program Contingency		900.0	(159.7)	740.3	-	712.4	(27.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	5,503.3	8,685.0		

Notes: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with risk analysis assessments for the TBSRP Projects and the TBSRP

Within Approved Current Schedule and Budget

Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation

Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

<sup>\*</sup>Current contract allotment to install two submarine electrical cables is \$11.5 million. Additional non-program funding to support this allocation beyond the \$9.6 million of available program funds has been made available by the Treasure Island Development Authority.

# Toll Bridge Seismic Retrofit Program - Schedule

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (2/2008)	Project Complete Schedule Forecast (02/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	С	d = b + c	е	f = e – d	g	h
SFOBB East Span Replacement P	roject						
Skyway	Apr 07	8	Dec 07	Dec 07	-	•	See page 22.
SAS E2/T1 Foundations	Jun 08	(5)	Jan 08	Jan 08	-	•	
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-		See discussion on starting on page 16.
YBI Detour	Jul 07	36	Jun 10	Jun 10	-	•	See discussion on page 24.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	•	
Oakland Touchdown (OTD)	Nov 13	12	Nov 14	Nov 14	-	•	See Note.
OTD Submarine Cable	n/a	-	Jan 08	Jan 08	-	•	
OTD Westbound	n/a	-	Jan 10	Jan 10	-	•	
OTD Eastbound	n/a	-	Nov 14	Nov 14	-	•	
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	•	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	•	
Open to Traffic Date:     Westbound	Sep 11	12	Sep 12	Sep 12	-	•	See Note.
<ul> <li>Open to Traffic Date:</li> <li>Eastbound</li> </ul>	Sep 12	12	Sep 13	Sep 13	-	•	See Note.
SFOBB West Approach Replacement	Aug 09	(7)	Jan 09	Jan 09	-	•	Seismic retrofit completed December 2, 2008. Ongoing punchlist and close-out items scheduled for completion by February 2009.
Open to Traffic Date:     Mainline Realignment	n/a	-	Apr 08	Apr 08	-	•	Opened to traffic April 12, 2008

# Regional Measure 1 Program - Cost (\$ Millions)

Project	Work Status	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (02/2009)	Cost To Date (02/2009)	Cost Forecast* (02/2009)	At- Completion Variance	Cost Status
a	b	С	d	e = c + d	f	g	h = g - e	i
New Benicia-Martinez Bridge Project	Construction							•
Capital Outlay Support		157.1	35.2	192.3	186.1	192.3	-	
Capital Outlay Construction		861.6	173.5	1,035.1	980.0	1,035.1	-	
Capital OutlayRight-of-Way		20.4	(0.1)	20.3	17.0	20.3	-	
Project Reserve		20.8	4.0	24.8	-	24.8	-	
Total New Benicia-Martinez Bridge Project		1,059.9	212.6	1,272.5	1,183.1	1,272.5	-	
I-880/SR-92 Interchange Reconstruction	Design							•
Capital Outlay Support		28.8	26.2	55.0	45.5	55.0	-	
Capital Outlay Construction		94.8	60.2	155.0	56.7	155.0	-	
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.6	16.9	-	
Project Reserve		0.3	17.8	18.1	-	18.1	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	113.8	245.0	-	
Program Completed Projects	Complete							•
Capital Outlay Support		186.4	(5.0)	181.4	181.4	182.6	1.2	
Capital Outlay Construction		705.6	3.6	709.2	686.5	697.6	(11.6)	
Capital Outlay Right-of-Way		12.2	-	12.2	10.6	11.3	(0.9)	
Project Reserve		14.7	1.4	16.1	-	7.4	(8.7)	
Total Program Completed Projects		918.9	-	918.9	878.5	898.9	(20.0)	
Total Regional Measure 1 Program		2,112.6	323.8	2,436.4	2,175.4	2,416.4	(20.0)	

Note: Details may not sum to totals due to rounding effects.

Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with risk analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

Within Approved Current Schedule and Budget

Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation

Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

# Regional Measure 1 Program - **Schedule**

Project	BATA Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (11/2008)	Project Complete Schedule Forecast (11/2008)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	С	d = b + c	е	f = e - d	g	h
New Benicia-Martinez Bridge Project							
Existing Bridge & Interchange Modifications	Dec 09	-	Dec 09	Oct 09	(2)	•	See page 31.
Open to Traffic Date						•	
open to maine bate	Dec 07	-	Aug 07	Aug 07	-		
I-880/SR-92 Interchange Reconstruction	Dec 10	-	Jun 11	Jun 11	-	•	





# San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, critical questions lingered: how could the Bay Bridge—a vital regional lifeline structure—be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each of the separate elements seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge — the need to accommodate the more than 280,000 vehicles that cross the bridge each day.

# West Approach Seismic Replacement Project Project Status: Completed 2008

Seismic safety retrofit work on the West Approach in San Francisco — bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street — involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on- and off-ramps, within the confines of the West Approach's original footprint.

# West Span Seismic Retrofit Project Project Status: Completed 2004

The West Span lie between Yerba Buena Island and San Francisco comprised of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span along with new seismic shock absorbers and bracing.



**Completed West Approach Replacement Structure** 



West Span of the Bay Bridge While Undergoing Seismic Retrofit

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# East Span Seismic Replacement Project Project Status: Under Construction

Rather than a seismic retrofit, the two-mile-long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be parallel, providing motorists with expansive views of the Bay. These views also will be enjoyed by bicyclists and pedestrians, thanks to a new path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue flowing on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge, connected to an elegant roadway supported by piers (Skyway), which will gradually slope down towards the Oakland shoreline (Oakland Touchdown). A new Transition Structure on Yerba Buena Island (YBI) will connect the SAS to the YBI tunnel, and will transition the East Span's side-by-side traffic to the upper and lower decks of the tunnel and west spans.

When construction of the new East Span is complete and vehicles have been safely rerouted to it, the original East Span will be demolished.

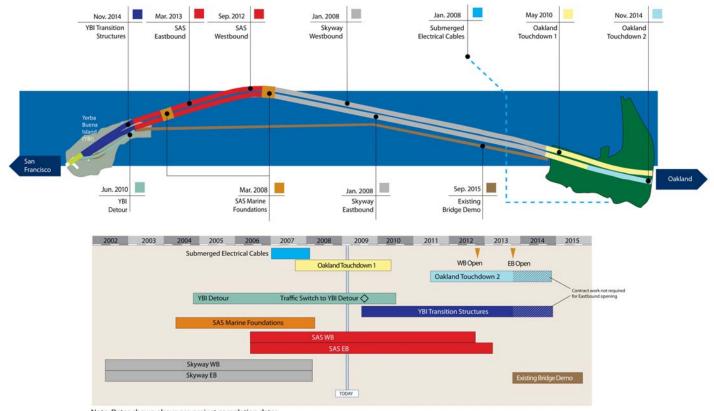


Simulation of New East Span in Relation to West Spans and the Golden Gate Bridge

# San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

The new East Span bridge can be split into four major components — the Skyway and the Self Anchored Suspension Bridge in the middle and the Yerba Island Transition Structures and Oakland Touchdown approaches at either end. Each component is being constructed by one to three separate contracts that all have be sequenced together.

# SFOBB East Span Work Sequence



Note: Dates shown above are project completion dates.

# San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the grey steel that currently cages drivers will be a graceful, elevated roadway supported by piers, providing sweeping views of the Bay.

# **Skyway Contract**

Contractor: Kiewit/FCI/Manson Joint Venture Approved Capital Outlay Budget: \$ 1,254.1 M Status: Completed

Extending for more than a mile across Oakland mudflats, this is the longest section of the East Span, between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway features shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three-stories high), and contain approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling, and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast, and were lifted into place by winches that were custom-made for this project.

The Skyway marine foundation consists of 160 hollow steel-pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered, or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major quake, the Skyway features several state-of-the art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.



Completed Skyway Left of Existing East Span



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Western end of Completed Skyway

# San Francisco-Oakland Bay Bridge East Span Replacement Project Self Anchored Suspension (SAS) Bridge

If one single element bestows the status of world-class on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

The SAS was separated into three separate contracts – construction of the land-based foundations and columns at Pier W2, construction of the marine-based foundations and columns at Piers T1 and E2, and the construction of the SAS steel superstructure, including the tower, roadway, and cabling. Construction of the foundations at Pier W2 and at Piers T1 and E2 was completed in 2004 and 2007 respectively.

# **SAS W2 Foundation Contracts**

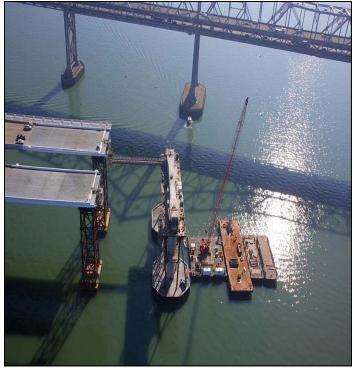
Contractor: West Bay Builders, Inc. Approved Capital Outlay Budget: \$ 26.4 M

Status: Completed

The twin W2 piers on Yerba Buena Island provide essential support for the western end of the SAS bridge where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge piers required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.



Construction of the Pier Table at W2



Construction of the Pier Table at E2

# **SAS T1 and E2 Foundations Contracts**

Contractor: Kiewit/FCI/Manson, Joint Venture Approved Capital Outlay Budget: \$ 280.9 M Status: Completed

The marine piers at T1 to support the main SAS tower and at E2 to anchor the main cable required significant on-water resources to drive the foundation support piles down not only to bedrock, but also through the bay water and mud. The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.

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# **SAS Superstructure Contract**

Contractor: American Bridge/Fluor Enterprises, Joint Venture

Approved Capital Outlay Budget: \$ 1,753.7 M Status: 37% Complete (Earned Value)

Rising 525 feet above mean sea level and embedded in rock, the single-tower SAS span is designed to withstand a massive earthquake. The SAS bridge is not just another suspension bridge. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to separate structures in the ground. While there will appear to be two main cables on the SAS, there actually will be only one. This single cable will be anchored within the eastern end of the roadway, carried over the tower and wrapped around the two side-by-side decks at the western end.

The single steel tower will be made up of four separate legs connected by shear link beams, which function in the same way as a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs. In addition, if one of the legs is damaged, the other legs will keep the bridge standing.



Simulation of new Self-Anchored Suspension Span

# Self Anchored Suspension (SAS) Construction Sequence and Status

### STEP 1 - CONSTRUCT TEMPORARY SUP-PORTS

Temporary support trusses will first need to be erected from the Skyway to Yerba Buena Island to support the new SAS bridge during construction.

**Status:** Foundations for the temporary supports have been completed. Support columns and trusses are now being installed.



### STEP 2 - INSTALL ROADWAYS

The roadway boxes will be lifted into place by using the shear leg crane barge. The boxes will be welded together atop the temporary support trusses to form two continuous parallel steel roadway boxes.

**Status:** The first shipment of roadway boxes is scheduled for early summer 2009.



### **STEP 3 - INSTALL TOWER**

Each of the four legs of the tower will be erected in five separate lifts. The first lift will use the shear leg crane barge while the remaining higher lifts will use a temporary support tower and lifting jacks.

**Status:** The first shipment of tower boxes is scheduled for late 2009. Tower installation cannot begin until the initial eastbound roadway boxes are installed between the existing east span and new



### STEP 4 - MAIN CABLE AND SUSPENDER INSTALLATION

The main cable will be pulled from the east end of the SAS bridge, over the tower, and wrapped around the west end before returning back. Suspender cables will be added to lift the roadway decks off the temporary support structure.

Status: Cable installation is pending the erection of the tower and roadway sections.



#### STEP 5 - WESTBOUND OPENING

The new bridge will first open in the westbound direction pending completion of the Yerba Buena Island Transition Structures. Westbound access to the Skyway from Oakland will be completed by the Oakland Touchdown 1 Contract in 2009.

**Status:** Westbound opening is scheduled for 2012.



#### STEP 6 - EASTBOUND OPENING

Opening of the bridge in the eastbound direction is pending completion of Oakland Touchdown 2, which needs westbound traffic off the existing bridge before the eastbound approach structure can be completed.

**Status:** Eastbound opening is scheduled for 2013.



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#### Self Anchored Suspension (SAS) Superstructure Fabrication Activities

Nearly every component of the SAS above the waterline — from the temporary support structures to the roadway and tower box sections to the main cable and suspender ropes — will be fabricated off-site and erected, bolted and welded into place upon arrival in the Bay Area. This project is truly global in nature, with fabrication of the bridge components happening not only in the United States, but around the world in China, the United Kingdom, Japan, South Korea and other locations.

#### Roadway and Tower Segments

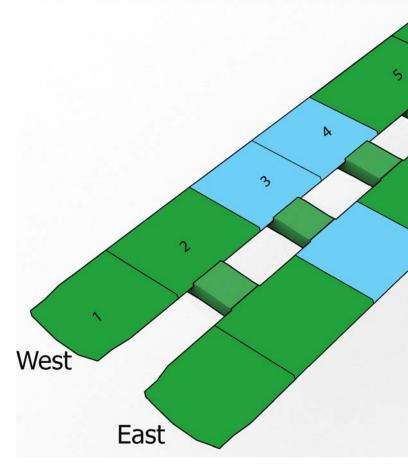
Like giant three-dimensional jigsaw puzzles, the roadway and tower segments of the SAS bridge are hollow steel shells that are internally strengthened and stiffened by a highly engineered network of welded steel ribs and diaphragms. The use of steel in this manner allows for a flexible yet relatively light and strong structure able to withstand the massive loads placed on the bridge during seismic events.

Activity Status: Segments are in various stages of fabrication. Roadway sections 3, 4, and 5 East and West have been assembled for paint and fit up, while roadway sections 1, 2, 6, and 7 have started assembly. Individual components for roadway sections 8, 9, and 11 are being fabricated. On the tower sections, assembly of the first of five tower lifts is well underway. The second tower lifts have also started to allow for trial fit-up prior to shipping of the first lift as per specification.

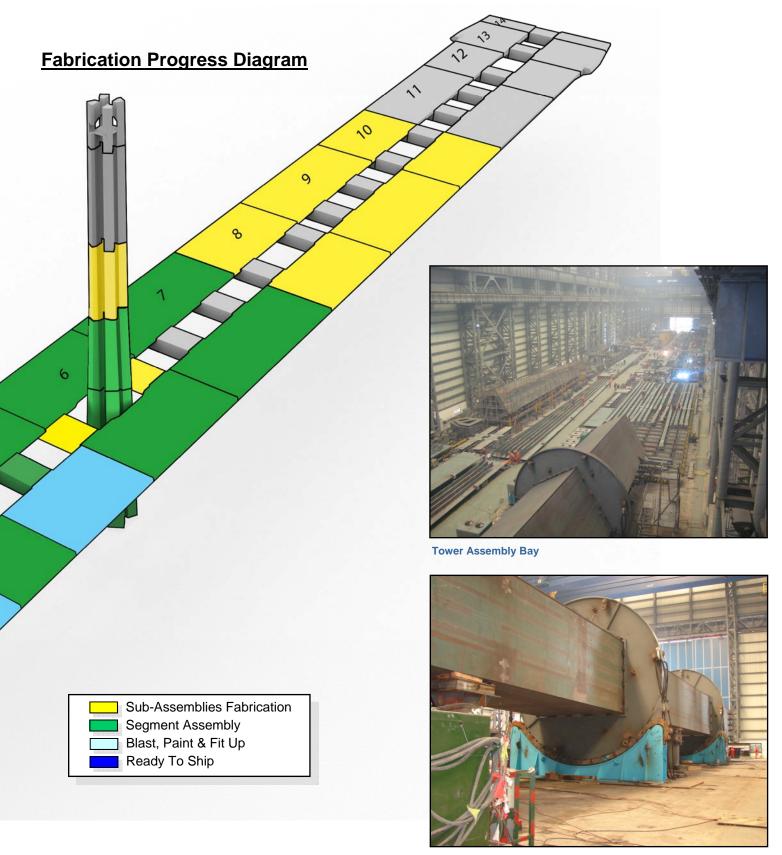




**Roadway Box Section In Assembly** 



Painted Roadway Box Section Ready For Fit-up



**Tower Box Section In Turning Jig** 

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#### Self Anchored Suspension (SAS) Superstructure Fabrication Activities

#### Cables and Suspenders

One continuous main cable will be used to support the roadway deck of the SAS bridge. Anchored into the eastern end of the bridge, the main cable will start on one side of Pier E2, go over the main tower at T1, loop around the western end of the roadway decks at Pier W2, and then back over main tower to the other end of Pier E2. The main cable will be made of up bundles of individual wire strands. Lifting up the roadway decks to the main cable will be a number of smaller suspender cables. The main cable will be fabricated in China and the suspender cables in Missouri.

**Activity Status:** Initial trial testing of main cable strands.



**Trial Cable Band Assembly** 



**Bronze Spherical Bushing for E2 Bearings** 

## Saddles, Bearings, Hinges, and Other Bridge Components

The mounts on which the main cable and suspender ropes will sit are made from solid steel castings.

Castings for the main cable saddles are being made by Japan Steel Works, while the cable bands and brackets are being made by Goodwin Steel in the United Kingdom.

The bridge bearings and hinges that support, connect, and transfer service loads from the SAS bridge to the adjoining sections of the new east span are being fabricated in a number of locations. Work on the bearings is being performed in Pennsylvania and South Korea, while hinge pipe beams are being fabricated in Oregon.

**Activity Status:** Under Fabrication

#### Self Anchored Suspension (SAS) Superstructure Field Activities



Ship Carrying the Shear Leg Crane Barge Crossing Beneath the West Span of the Bay Bridge

#### Shear Leg Crane Barge

The massive shear leg crane barge that will help build the arrived in the San Francisco Bay on March 12, 2009 after a trans-Pacific voyage.

The crane and barge are separate units operating as a single entity dubbed the Left Coast Lifter. The 400- by 100-foot barge is a U.S. flag vessel that was custom built in Portland, Oregon, by U.S. Barge, LLC and outfitted with the crane by Shanghai Zhenhua Port Machinery Co. Ltd. (ZPMC) at a facility near Shanghai, China. The crane's boom weighs 992 tons, and is 328 feet long. The crane can lift up to 1,873 tons, including the deck and tower sections for the SAS, which will begin arriving this summer.

The crane will offload and erect remaining the steel for the temporary support structures, as well as all of the deck and tower segments. Work on the eastbound side of the SAS must occur first, as the crane cannot reach over permanent westbound decks to work on the eastbound roadway.

Activity Status: On location.

#### Cap Beams

Construction of the massive steel reinforced concrete cap beams that link the columns at piers W2 and E2 was left to the SAS superstructure contractor and represent the only concrete portions of work that contract. The east and west ends of the SAS roadway will rest on the cap beams, and the main cable will wrap around and tie down upon them.

Activity Status: Completed.



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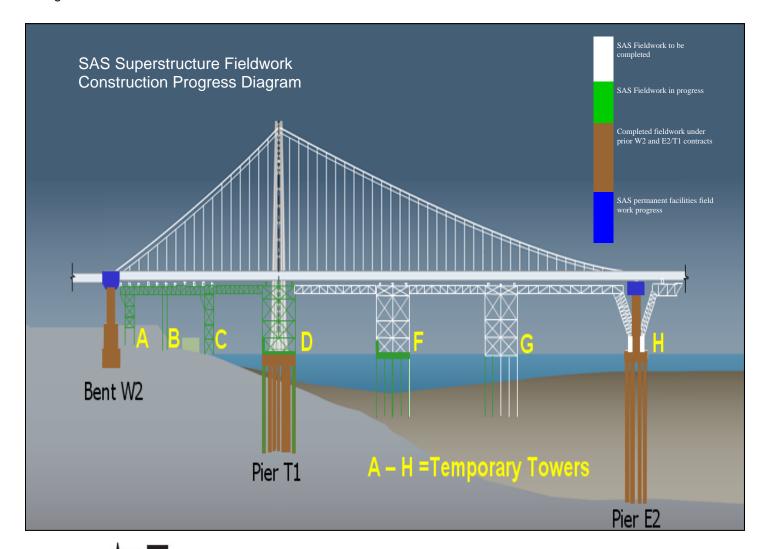
Nearly Completed Cap Beam at Pier E2

#### Self Anchored Suspension (SAS) Superstructure Field Activities

#### **Temporary Support Structures**

To erect the roadway and tower of the bridge, temporary support structures will first be put in place. Almost a bridge onto itself, the temporary support structures will stretch from the end of the completed skyway back to Yerba Buena Island. For the tower, a strand jack system is being built into the tower's temporary frame to elevate the upper sections of the tower into place. These temporary supports are being fabricated in the Bay Area, as well as in Oregon and in China at ZPMC.

**Activity Status:** Secondary channel between Yerba Buena Island and Oakland has been closed to shipping traffic. The temporary support foundations are complete and erection of completed trusses is on-going. Later remaining trusses are still being fabricated.



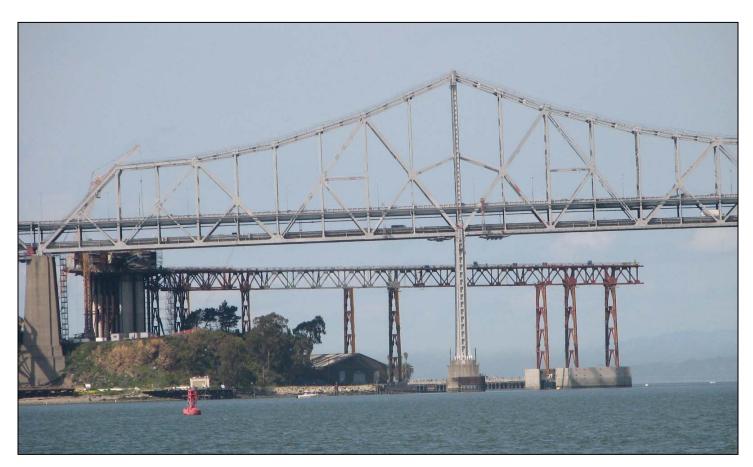
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Temporary Support Column Being Lifted Off Deck of Ship



**Temporary Support Structures Erected Behind Existing East Span** 

# San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Detour (YBID)

As with all of the Bay Bridge's seismic retrofit projects, crews must build the Yerba Buena Island Transition Structures (YBITS) close to moving vehicles without disrupting traffic. To accomplish this daunting task, eastbound and westbound traffic will be shifted off the existing roadway and onto a temporary detour supported by 200-foot-tall steel towers. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

#### **YBID Contract**

Contractor: CC Myers Inc.
Approved Capital Outlay Budget: \$ 442.2 M
Status: 79% Complete (Cost)

This contract originally was awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Due to the re-advertisement of the SAS superstructure contract in 2005 because of a lack of funding at the time, the bridge opening was rescheduled to 2013. This necessitated a temporary suspension of the detour contract and design changes to the viaduct. Now, in addition to a more robust detour viaduct, the contract has already replaced the tunnel approach on the upper deck, and will advance a number of foundations and columns for the Yerba Buena Island Transition Structures.



Successful Labor Day Weekend 2007 Roll-In of Replacement Tunnel Approach Roadway

#### **Tunnel Approach Roadway Replacement**

The first in a series of activities to open the detour viaduct was completed in 2007 with the replacement of a 350-foot long stretch of upper deck roadway just east of the Yerba Buena Island tunnel. During this historic milestone, the entire Bay Bridge was closed over the 2007 Labor Day Weekend so crews could demolish and replace the old section of deck with a seismically upgraded 6,500-ton precast section of viaduct that was literally pushed into place (See photo on following page).

**Activity Status: Completed** 



**Current Progress on Detour Structure** 

## Detour Viaduct Fabrication and Construction

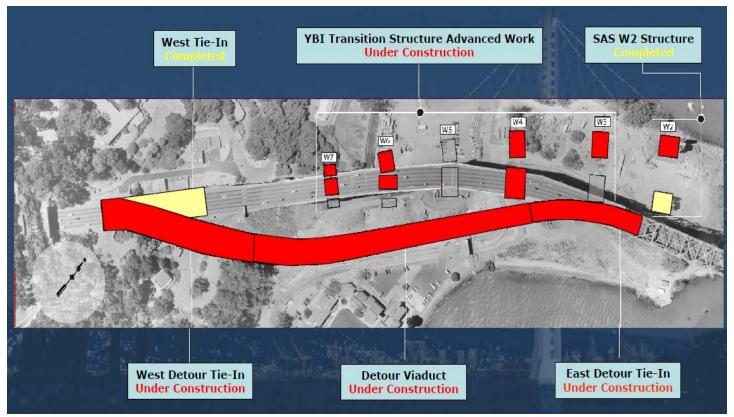
The detour viaduct will run generally parallel to the existing lanes on the island and will tie back into the existing bridge and tunnel. While speed limits will be reduced due to the turns needed to get on and off the detour, the viaduct will look quite similar to the existing bridge, with steel cross beams and girders and a concrete roadway deck. To insure a good fit, the steel viaduct truss members were pre-fitted during fabrication in South Korea and Oregon. Opening of the detour to traffic is discussed on the next page.

Activity Status: Most of the center portion of the detour viaduct has already been erected, including the concrete decks. At the west end of the detour, a cast-in-place concrete transition span is being poured to connect the detour into the completed tunnel approach roadway replacement span. At the east end, support structures are being erected to facilitate the roll-out/roll-in of the last truss section, which will tie the detour into the existing bridge.

#### **Demolition of Existing Viaduct**

After shifting traffic onto the detour structure, crews will focus on the demolition of the existing transition structure into the tunnel. The old transition structure will need to be removed before construction of the new transition structures from the SAS bridge to the YBI tunnel can be completed.

**Activity Status:** Start of demolition is pending opening of detour.



Overview of Yerba Buena Island Detour Contract Scope of Work

#### Yerba Buena Island Detour (YBID) East Tie-in Opening Activities

Shifting traffic to the Yerba Buena Island detour will be the most significant realignment of the bridge to date. To accomplish this, crews will cut away a 288-footportion of the existing truss bridge and replace it with a connection to the detour. This dramatic maneuver will involve aerial construction that occurs more than 100 feet above the ground. When the Bay Bridge reopens to traffic, vehicles will travel on the detour until the completion of the new East Span.

A detailed step-by-step construction sequence for the roll-out of existing span and roll-in of the new truss at the east tie-in to the detour viaduct structure is provided on the next page.



Skid Beams for Roll-Out and Roll-In of East Tie-in Structure Under Construction



Yerba Buena Island Detour Viaduct Under Construction (Foreground) with East Tie-IN Support Structures Being Erected (Right)

# East Tie-in Activities From Now to September 2009



As the detour viaduct is being constructed (left), a support structure of falsework will be erected to support the new and existing trusses and the skid bent girders on which the trusses will move on.



The new roll-in truss will be constructed atop the skid bent just south of the existing truss.



When the roll-in truss and detour viaduct is ready to be installed and opened to traffic, the Bay Bridge will be closed to all traffic.

# East Tie-in Activities Over Labor Day Weekend 2009



After the bridge is closed, the existing truss will be cut loose at both ends and lifted onto the skid bent girders. The truss will then be rolled-out hydraulically using jacks to push the truss aside, similar to those used for the Labor Day 2007 move.



After the existing truss has been rolled-out of the way, the new truss will be similarly rolled-in place using the same hydraulic jacking system.



After being rolled-in place, the new truss will be secured to the detour viaduct and existing bridge and the Bay Bridge will be re-opened to traffic. Removal of the rolled-out span will commence soon after the new truss is secured.

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# San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Transition Structures (YBITS)

The new Yerba Buena Island Transition Structures (YBITS) will connect the new SAS bridge to the existing Yerba Buena Island tunnel transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns have been advanced by the YBID contract, the remaining work will be completed under three separate YBITS contracts.

#### **YBITS #1 Contract**

Contractor: TBD

Approved Capital Outlay Budget: \$ 214.3 M

Status: Advertised

The YBITS #1 contract will construct the mainline roadway structures from the SAS bridge to the YBI tunnel. Work on the structures is scheduled to start once the existing structures have been demolished and removed from site.



Simulation of Future Yerba Buena Island Transition Structures (Top) with Detour Viaduct (Bottom)

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#### **YBITS #2 Contract**

Contractor: TBD

Approved Capital Outlay Budget: \$58.5 M

Status: In design

The YBITS #2 will demolish the detour viaduct after all traffic is placed upon the new bridge and construct a new eastbound on-ramp to the bridge in its place. The new ramp also will provide the final link for bicycle/pedestrian access off the SAS bridge and onto Yerba Buena Island.

#### **YBITS Landscaping Contract**

Contractor: TBD

Approved Capital Outlay Budget: \$ 3.3 M

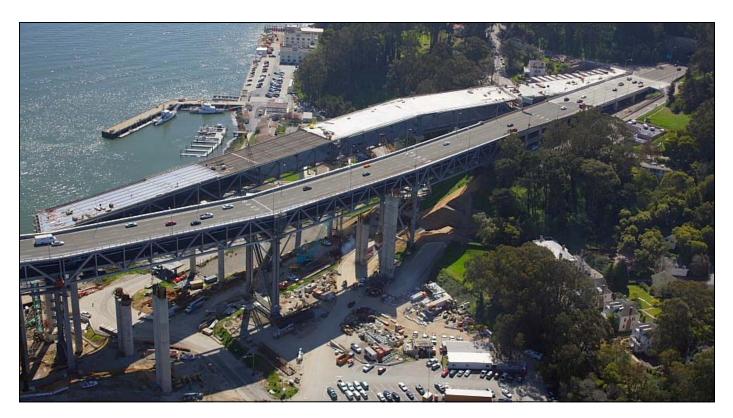
Status: In design

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to re-plant and landscape the area.

#### Yerba Buena Island Transition Structures Advanced Work

Due to the re-advertisement of the SAS superstructure contract in 2005, it became necessary to temporarily suspend the detour contract and make design changes to the viaduct. To make more effective use of the extended contract duration, and to reduce overall project schedule and construction risks, the TBPOC approved the advancement of foundation and column work from the Yerba Buena Island Transition Structures contract.

**Activity Status**: Advanced foundations and columns at piers W3 (L)eft and (R)ight, W4 L and R, W5 R, W6 L and R, and W7 L and R have been completed under contract change order. W5 L is pending construction after demolition of the existing transition structure.



YBITS Advanced Foundation and Column Work Just North Of Existing Viaduct (Foreground)

## San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Touchdown

When completed, the Oakland Touchdown Structures (OTD) will connect Interstate 80 in Oakland to the new side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway into the East Bay.

The OTD will be constructed through two contracts. The first contract will build the new westbound lanes, as well as part of the eastbound lanes. The second contract, to complete the eastbound lanes, cannot fully begin until westbound is traffic is shifted onto the new bridge so that a portion of the existing upper deck can be demolished to allow for a smooth transition for the new eastbound lanes in Oakland.



Oakland Touchdown #1 Constructing Temporary Abutment for the Eastbound Structure

#### **Oakland Touchdown #1 Contract**

Contractor: MCM Construction, Inc. Approved Capital Outlay Budget: \$ 226.5 M Status: 74% Complete (Cost)

The OTD #1 contract constructs the entire 1,000 feet long westbound approach from the toll plaza to the skyway. When completed, the westbound approach structure will be used directly access the westbound Skyway. In the eastbound direction, the contract will construct a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

On the westbound structure, the contractor has completed all foundation work and is now proceeding with superstructure work. Work continues on the eastbound structure's foundations and columns.

#### Oakland Touchdown #2 Contract

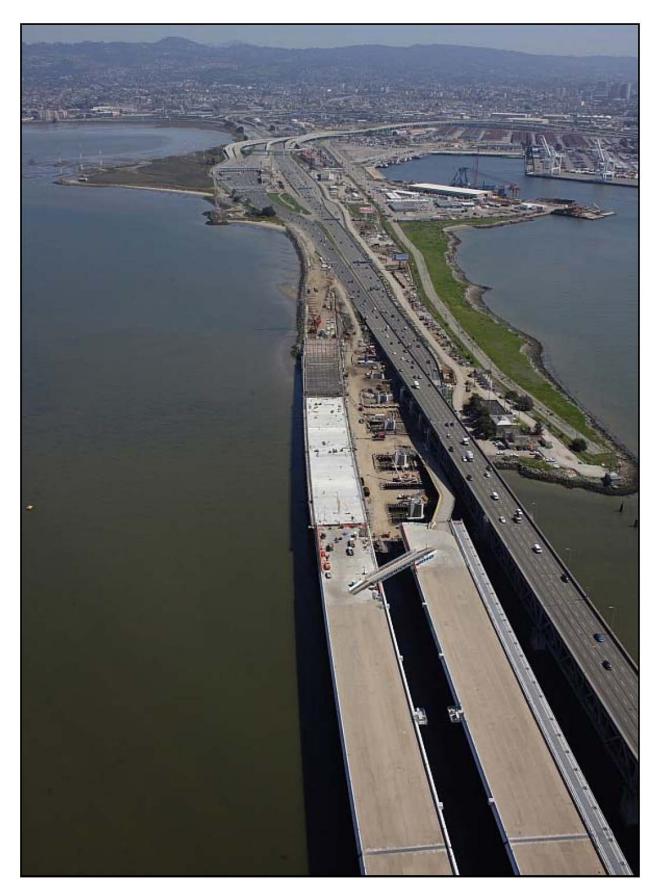
Contractor: TBD

Approved Capital Outlay Budget: \$ 62.0 M

Status: In design

The OTD #2 contract will complete the eastbound approach structure from the end of the skyway to Oakland. This work is critical to the eastbound opening of the new bridge, but cannot be completed until westbound traffic has been shifted off the existing upper deck to the new SAS bridge.

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Oakland Touchdown Under Construction with New Westbound Structure on left.

## San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archaeological artifacts, and prepare areas for future work already have been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.



**Archeological Investigations** 

#### **East Span Interim Seismic Retrofit**

Contractor: California Engineering Contractors &

**Balfour Beatty** 

Approved Capital Outlay Budget: \$ 30.8 M

Status: Completed

After the 1989 Loma Prieta earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span is completely replaced. This interim retrofit lengthened pier seats, added some structural members, and strengthened areas of the bridge to be more resilient during an earthquake.



**Existing East Span of Bay Bridge** 

#### **Stormwater Treatment Measures**

Contractor: Diablo Construction, Inc.
Approved Capital Outlay Budget: \$ 18.3 M

Status: Completed

The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of storm water runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.



**Stormwater Retention Basin** 

#### Yerba Buena Island Substation

Contractor: West Bay Builders

Approved Capital Outlay Budget: \$ 11.6 M

Status: Completed

This contract relocated an electrical substation just east of the Yerba Buena Island tunnel in preparation for the new East Span.



**New YBI Electrical Substation** 

#### **Pile Installation Demonstration**

Contractor: Manson and Dutra, Joint Venture Approved Capital Outlay Budget: \$9.2 M

Status: Completed

While common in offshore drilling, the new East Span is one of the first bridges to use large diameter battered piles in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.

#### **Electrical Cable Relocation**

Contractor: Manson Construction
Approved Capital Outlay Budget: \$ 7.9 M

Status: Completed

A submerged cable from Oakland, near where the new bridge will touchdown, supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, 2 new cables were run from Oakland to Treasure Island to replace the existing cable. The extra cable is funded by the Treasure Island Development Authority for its future development plans.

33

#### **Existing Bridge Demolition**

Contractor: TBD

Approved Capital Outlay Budget: \$ 239.2 M

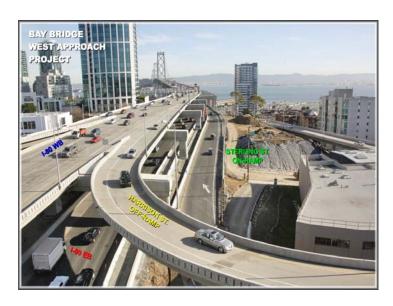
Status: In Design

Design work on the contract will start in earnest as opening of the new bridge to traffic approaches.

# San Francisco-Oakland Bay Bridge West Approach Replacement Project Project Status: Completed 2009

Seismic safety retrofit work on the West Approach — bordered by 5th Street and the Anchorage at Beale Street — involved completely removing and replacing this one-mile stretch of Interstate 80 and six on- and off-ramps in its original footprint. This work occurred while more than 280,000 vehicles passed by daily in the midst of this essential construction.

The West Approach originally had one foundation system supporting both an upper and lower deck configuration from 3rd Street to Beale Street. Each deck now has its own independent column and foundation support system, a crucial aspect of making the West Approach seismically sound. The roadways between 3rd and 5th Streets are parallel concrete decks that transition into the double-deck configuration as drivers approach the West Span of the Bay Bridge.



Recently Reopened Harrison Street Off-ramp.

#### **West Approach Seismic Replacement Contract**

Contractor: Tutor-Saliba, Joint Venture Approved Capital Outlay Budget: \$333.7 M

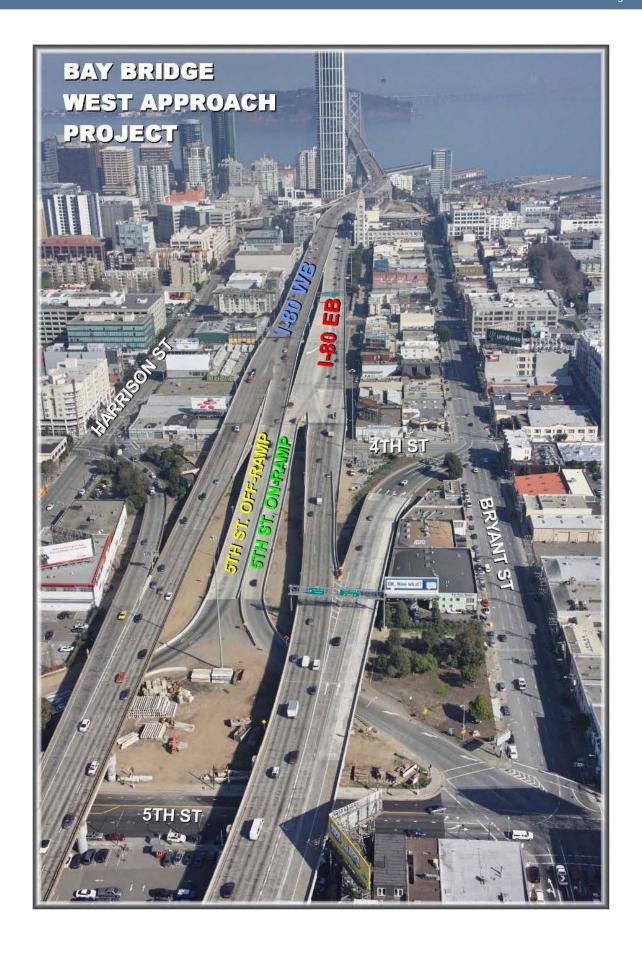
Status: 98% Complete (Cost)

To minimize disruptions to the neighborhood, and to keep the bridge's traffic moving, the project was performed in a series of six elaborate stages, including a series of lane shifts, regular lane and ramp closures, and one partial bridge closure. Each of the six stages of retrofit work follows a carefully staged formula to meet seismic safety standards. A temporary structure is built and vehicles are rerouted to it. The old structure is then demolished, and work begins on the new structure in the original footprint. Drivers are then rerouted back onto the completed replacement structure, and the temporary structure is demolished.

Work on the 72-year-old structure began in 2003, and was substantially completed in early 2009.



Workers Constructing Infill Wall beneath West Approach



# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Other Completed Projects

The State Legislature in the 1990s identified seven of the nine State-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of the all bridges have been completed as planned.

#### San Mateo-Hayward Bridge Seismic Retrofit Project Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on the strengthening of the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.



High-Rise Section of San Mateo-Hayward Bridge



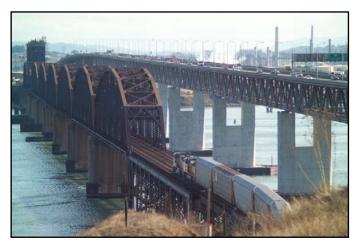
1958 Carquinez Bridge (foreground), along with 1927 span (middle) under demolition and new Alfred Zampa Memorial Bridge (background)

# 1958 Carquinez Bridge Seismic Retrofit Project Project Status: Completed 2003

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thru-truss structure.

# 1962 Benicia-Martinez Bridge Seismic Retrofit Project Project Status: Completed 2003

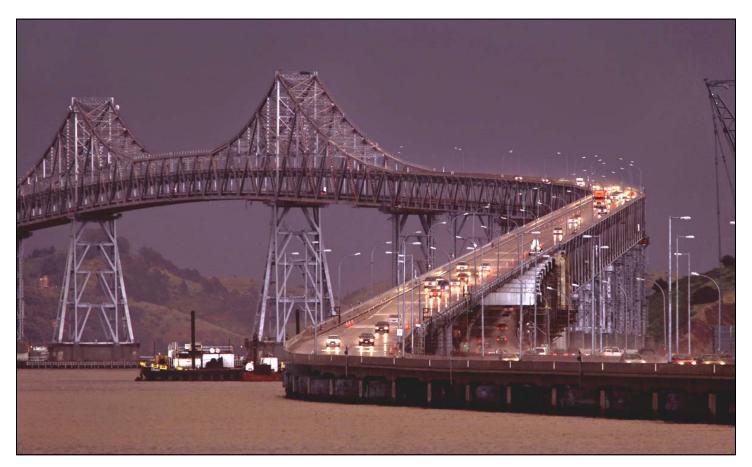
The southbound 1962 Benicia-Martinez Bridge was retrofitted to "Lifeline" status with the strengthening of the foundations and columns, and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after an event, and to reopen quickly to emergency response traffic.



1962 Benicia Martinez Bridge (right)

#### Richmond-San Rafael Bridge Seismic Retrofit Project Project Status: Completed 2005

The Richmond-San Rafael Bridge was retrofitted to a "No Collapse" classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin county was replaced.



Richmond-San Rafael Bridge

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Risk Management

AB144 states that Caltrans must "regularly reassess its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes." AB 144 set a \$900 million program reserve (also referred to as the program contingency). The program contingency is currently at \$757.3 million according to the TBPOC approved budget, unchanged from the previous quarter.

#### What Risk Management Does and Does Not Include

Risk management of a project addresses risks that may affect its defined objectives of cost, time, scope and quality. Given a project plan, risk management generally looks at ways in which the project may not go according to plan. Risk management focuses on the defined project scope and objectives, and therefore does not include:

- Risks or possible decisions that may kill the project. If the project ceases to exist, there are no risks to manage.
  - For example, risk management does not include risks such as the loss of funding, natural disaster that destroys all or part of the construction or acts of governments.
- Risks or possible decisions that may materially change the project. If the project objectives are changed substantially, risk management will start afresh on the "new" project.

For example, the YBI Detour contract was materially changed by the YBID Implementation Strategy Memorandum. The risk of such a decision was not in the risk register of the original contract.

In a nutshell, risk management is confined to quantifying risks that are intended to be covered by project and program contingency.

#### **DEVELOPMENTS IN THE THIRD QUARTER**

#### SAS Contract

Some of the main risk management accomplishments on the SAS contract during the third Quarter 2008 were:

a) MEP (mechanical/electrical/piping systems): The MEP focus team developed several risk responses in the third quarter. The MEP team proposes to integrate the planned MEP contract work into the SAS contract as a contract change order. This will mitigate schedule risk to the opening of the new span and will enhance system compatibility throughout the structure.

- b) "Green Tag" Process: Quality Assurance of the fabrication of the SAS is necessary for the structure to achieve its life-line designation and the stipulated 150-year design life. Tracking and documenting the quality control of each fabricated piece through the fabrication process is a more efficient method to ensure the quality of the work than the original periodic quality control reporting. Team China implemented the new Green Tagging Procedures in the 3rd quarter. The new procedures will mitigate future fabrication schedule risk and help deliver a top-quality project.
- c) Acceptance of the Criteria Contract Change Order (CCO): There had been continuing discussion with the contractor about the interpretation of contractual criteria for accepting welding work in China. The criteria were clarified by the CCO and implemented by Team China.
- d) Tack Weld Issue: Resolved by engaging the contractor, industry experts and Team China. Caltrans instituted inspection protocols approved by engineering professionals from around the world and placed a number of qualified construction and inspection staff at the fabrication facilities to ensure quality. Furthermore, the TBPOC is negotiating directly with the SAS contractor to mitigate any schedule delays.
- e) Cable Issues: The Cable Engineering Risk Management (CERM) team continued to engage international experts to help resolve the complex cable engineering and geometry issues. The SAS main cable geometry depends on the weight of the Orthotropic Box Girder (OBG) and the suspender loads. The CERM team has recommended that additional cable bands and cable brackets be procured to cover all potential geometry variations that may occur where the cable interacts with the deck.

#### Yerba Buena Island Detour (YBID) Contract

Some of the main risk management developments in the third quarter on the YBI Detour contract are:

- East Tie-In: The addition of a second fabricator removes the truss fabrication from the schedule critical path and mitigates schedule risk to the traffic shift planned for the fall of 2009.
- b) East Tie-In: The procurement of the crane trestle on the YBI shoreline allows flexibility in construction going forward and reduces schedule risk during the critical weeks before the traffic switch.
- East Tie-In: Collaborative on-site meetings between Caltrans Construction, Design and the contractor have

resolved many issues in design and fabrication processes and reduced schedule risk (e.g. truss camber).

- West Tie-In: Incentive/disincentive provisions will assist in keeping this portion of the work off the critical schedule path.
- e) West Tie-In: Developing high performance concrete to accelerate the closure pour will help insure that the Bay Bridge can be returned to service as soon as possible during the traffic switch.
- f) YBI Transition Structure Advance Work: Elimination of the mass concrete requirement has resulted in cost savings to the contract.
- g) Demolition: The contract team is assessing a new strategy to allow demolition work to proceed on all spans after the traffic switch instead of demolishing the bridge one span at a time. The new approach uses falsework and the contractor's jacking system to help protect the access road to the Coast Guard station while the demolition work is in progress.

#### Oakland Touchdown Westbound (OTD #1) Contract

Some of the main risk management developments on the OTD1 contract during the third quarter 2008 were:

- Caltrans is engaging the contractor to commence the Integrated Shop Drawings (ISD) preparation earlier for the eastbound bridge.
- b) Caltrans is assessing the option to procure additional falsework to help mitigate potential delays.
- c) Caltrans safety and stormwater pollution prevention personnel have been engaged to help interact with OSHA and other permitting agencies to mitigate schedule risk.
- d) Adopting successful risk management practices from the Skyway and E2-T1 contracts, Caltrans is aggressively managing claims to achieve early settlements.

#### YBI Transition Structure (YBITS#1) Contract

Some of the main risk management developments on the YBITS #1 contract during the third quarter 2008 were:

- The contract specifications team began work on refining the integrated shop drawing specification and process.
- b) The contract specifications team is recommending that a "working campus" specification be added to help resolve future congestion and conflict issues.
- c) The focus group addressing Hinge K risks delivered its recommendations during the third quarter.

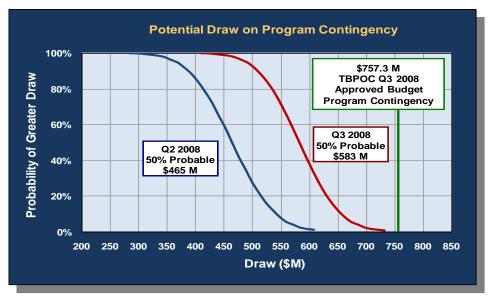


Figure 1 - potential draw on program contingency

The curve in Figure 1 can be used to directly read off the probability of exceeding any value of cost. For example, there is a 20% chance of exceeding \$625M. Note that although the curve appears to reach a zero probability of overrun at about \$730M, there is still less than a 1% chance of some cost greater than \$730M. None of the probabilities above \$730M are zero; they are just very small, much less than 1%. Note that the curve does not include risks or possible decisions that may kill or materially change the project.

The \$740.3 M TBPOC Q4 2008 Approved Budget Program Contingency is sufficient to cover identified risks. Ongoing risk mitigation actions will continue to be developed and implemented to reduce the potential draw on the Program Contingency.

#### SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

# **Dumbarton Bridge Seismic Retrofit Project Project Status: In Design**

The Dumbarton Bridge was opened to traffic in 1982, linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile long bridge carries an average daily traffic of nearly 60,000 vehicles over its six lanes, and has an eight-foot bicycle/pedestrian lane to the south.

While located between the San Andreas and Hayward faults, the Dumbarton Bridge was not included in the Toll Bridge Seismic Retrofit Program based on evaluations made in the 1990s that concluded that bridge did not warrant retrofitting. The bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.



Mock-up of Dumbarton pier columns undergoing seismic testing



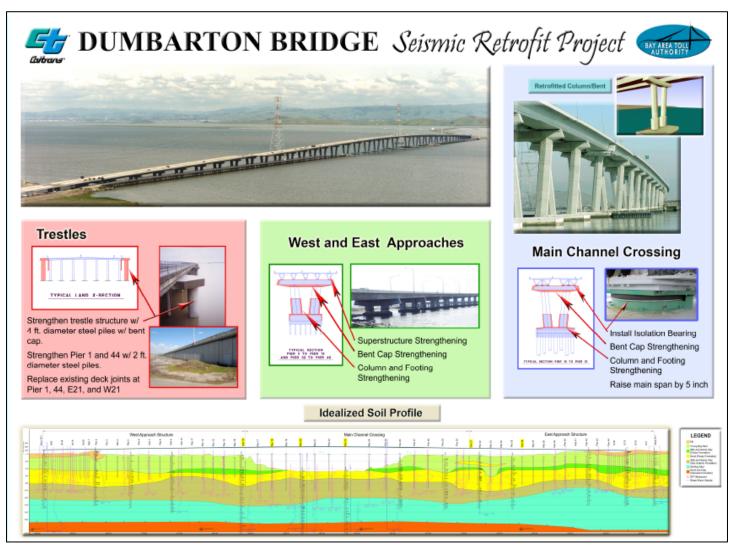
Existing Dumbarton Bridge looking east toward the Alameda County foothills

Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps toward retrofitting the Dumbarton bridge, even though full funding for the project has not yet identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This includes detailed geotechnical and geophysical investigations at the bridge, and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Dumbarton Bridge includes superstructure and deck modifications, plus strengthening of the over-land approach slab structures. Additional activities are identified in the

attached diagram. The Toll Bridge Seismic Safety Peer Review Panel has been presented the results of the seismic analysis and proposed retrofit strategy.

**Status:** The project team is scheduled to deliver 65 percent design plans for review in March 2009. Complete plans and specifications are expected by the end of the year, with contract advertisement in 2010. The estimated cost of the Dumbarton Bridge seismic retrofit is \$637 million. Full funding for the project has not yet been identified, but likely will come from a combination of sources, such as a toll increase, and state and/or federal funding.



Seismic Retrofit Strategy Summary for Dumbarton Bridge

#### SEISMIC RETROFIT OF DUMBARTON AND ANTIOCH BRIDGES

# Antioch Bridge Seismic Retrofit Project Project Status: In Design

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River linking eastern Contra Costa County with Sacramento County. The current bridge was opened in 1978 with one lane in each direction and carries an average of over 10,000 vehicles a day. Approximately 1.8 miles long, the bridge is a steel girder support roadway on reinforced concrete columns and foundations.

Like the Dumbarton Bridge, the Antioch bridge was not included in the Toll Bridge Seismic Retrofit Program, based on evaluations made in the 1990s that concluded that the bridge did not warrant retrofitting. The Antioch bridge has since been reevaluated for seismic vulnerability based on more recent seismic engineering, which has shown the bridge to be susceptible to damage from a major earthquake.

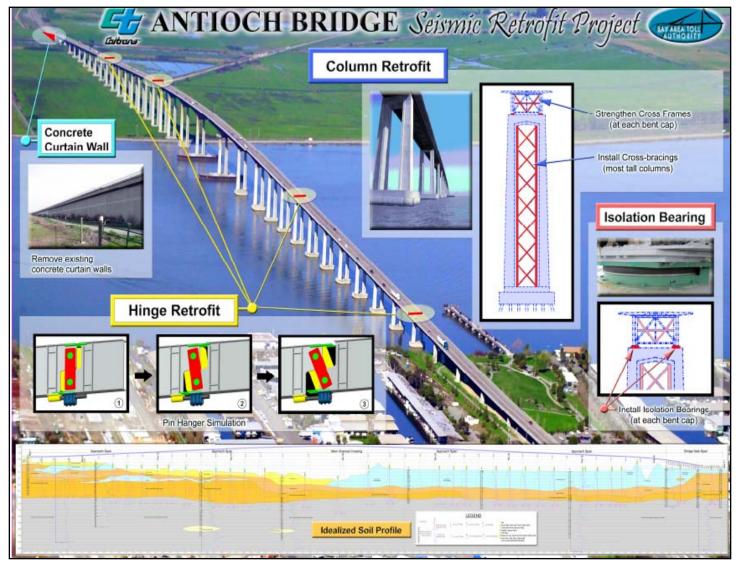
Based on the vulnerability studies and a follow-up sensitivity analysis of seismic risk, Caltrans and BATA decided to take steps towards the retrofitting the Antioch Bridge, even though full funding for the project has not yet be identified. Using BATA toll bridge rehabilitation funding, a comprehensive seismic analysis of the bridge has commenced. This analysis includes detailed geotechnical and geophysical investigation at the bridge, and the development of a seismic retrofit strategy and design plans.

The current retrofit strategy for the Antioch Bridge includes relatively minor modifications to the approach structure on Sherman Island, addition of isolation bearings, strengthening of the columns, and hinge retrofits. The Toll Bridge Seismic Safety Peer Review Panel has been presented the results of the seismic analysis and proposed retrofit strategy.



**Antioch Bridge** 

Status: The project team is scheduled to deliver 65 percent design plans for review in March 2009. Complete plans and specifications are expected by the end of the year, with contract advertisement in 2010. The estimated cost of the Antioch Bridge seismic retrofit is \$313 million. Full funding for the project has not yet been identified, but likely will come from a combination of sources, such as a toll increase, and state and/or federal funding.

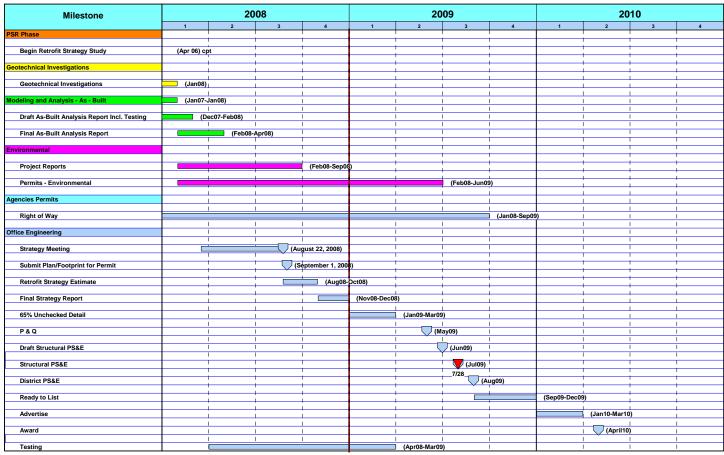


Seismic Retrofit Strategy Summary for Antioch Bridge

#### Seismic Retrofits of Dumbarton and Antioch Bridges

#### **Project Cost and Schedule Summaries**







# REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

#### REGIONAL MEASURE 1 PROGRAM

# New Benicia-Martinez Bridge Project Project Status: New Bridge Completed 2007

The new Congressman George Miller Bridge opened to traffic in August 2007, taking its place alongside the existing 1962 Benicia-Martinez Bridge, which is named for Congressman Miller's father, the late George Miller, Jr. The new bridge carries five lanes of northbound Interstate 680 traffic, while the existing bridge is being upgraded to carry four lanes of southbound traffic and a new bicycle/pedestrian pathway.

Decades in the planning and construction, the new bridge is designed to a "Lifeline" seismic design standard, expected to be available for emergency response vehicles soon after a major seismic event. Constructed of lightweight concrete, the structure is one of the longest post-tensioned reinforced cast-in-place concrete bridges in the world. The new toll plaza, relocated from Benicia to Martinez, features the Bay Area's first Fas-Trak® express lanes, which vastly increase the throughput of vehicles using electronic toll collection.



New Benicia-Martinez Bridge opened to traffic in August 2007.

#### 1962 Benicia-Martinez Bridge Reconstruction Contract

Contractor: ACC/Top Grade, Joint Venture Approved Capital Outlay Budget: \$ 59.5 M Status: 63% Complete (Cost)

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile deck on steel truss bridge is being modified to carry four lanes of southbound traffic (one more than before) — with shoulders on both sides — plus a bicycle/pedestrian path on the west side of the span that will connect to Park Road in Benicia and to Marina Vista Boulevard in Martinez.

## Stage 1 – Reconstruction of East Side of Bridge and Approaches

Completed in August 2008, this stage involved removal of the old toll plaza on the Benicia side of the bridge, deck repairs on the east side of span, and repair of the roadway undulations on the southern approach just south of the Marina Vista interchange.



Workers demolishing old section of deck for rehabilitation.

Activity Status: Completed

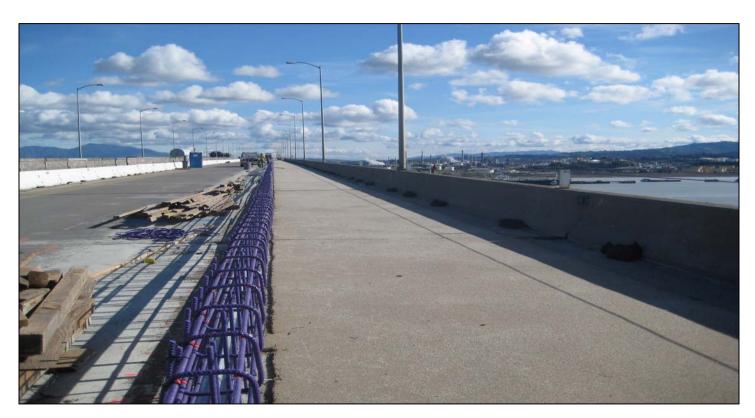
# Stage 2 – Reconstruction of West Side of Bridge and Approaches and Construction of Bicycle/Pedestrian Pathway

This stage began after southbound traffic was shifted from the west side of the bridge to the newly refurbished east side, It involves repairing the west side bridge deck, repairing undulations on the west side of the roadway in Martinez, demolishing obsolete I-680/I-780 interchange structures, realigning southbound Interstate 680 for four lanes, and construction of the barrier separating traffic lanes from the bicycle/pedestrian path.

Activity Status: Remaining tasks include jacking up the western portions of the Marina Vista interchange to bring the lanes into the proper alignment, completion of deck rehabilitation work, repair of roadway undulations, and the addition of a new concrete barrier to separate pedestrians and bicyclists from vehicular traffic. The work is currently two months ahead of schedule.



Pedestrian/bicycle pathway interior barrier being mocked-up.



New pedestrian/bicycle pathway is under construction on west side of existing bridge.

#### **REGIONAL MEASURE 1 PROGRAM**

# Interstate 880/State Route 92 Interchange Reconstruction Project Project Status: Under Construction

The Interstate 880/State Route 92 Interchange Reconstruction Project is the final project under the Regional Measure 1 Toll Bridge Program. Project completion fulfills a promise made to Bay Area voters in 1988 to deliver a slate of projects that help expand bridge capacity and improve safety on the bridges.

This corridor consistently is one of the Bay Area's most congested during the evening commute. This is due in part to the lane merging and weaving that is required by the existing cloverleaf interchange. The new interchange will feature direct freeway-to-freeway connector ramps that will increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct connector ramps, drivers coming off the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880.



Future Interstate 880/State Route 92 Interchange (as simulated) looking east towards San Mateo.

#### **Interstate 880/State Route 92 Interchange Reconstruction Contract**

Contractor: Flatiron/Granite

Approved Capital Outlay Budget: \$ 155.0 M

Status: 44% Complete (Cost)



New East Route 92 to North Interstate 880 Connector under construction.

## Stage 1 – Construct East Route 92 to North Interstate 880 Connector

The new east Route 92 to north Interstate 880 connector (ENCONN) is the most critical flyover structure for relieving congestion in the corridor. The ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

**Activity Status:** The structure is nearly complete and is scheduled to open to detour traffic in early May 2009.

## Stage 2 – Replace South Side of Route 92 Separation Structure

By detouring eastbound Route 92 traffic onto ENCONN, the existing separation structure that carries SR-92 over I-880 can be replaced. The separation structure needs to be elevated to accommodate east Route 92 to north Interstate 80 traffic under it without a loop alignment. The existing structure will be cut lengthwise, and then demolished and replaced separately. In this stage, south side of the structure will be replaced, while West Route 92 and south Interstate 880 to east Route 92 traffic will stay on the remaining structure.

Activity Status: Pending Stage 1.

## Stage 3 – Replace North Side Route 92 Separation Structure

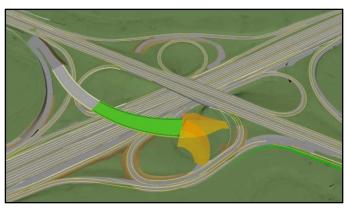
Upon completion of Stage 2, the existing north side of the separation structure will be demolished and replaced. Its traffic now shifted onto the newly reconstructed south side.

Activity Status: Pending Stage 2

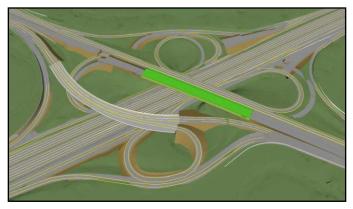
#### Stage 4 - Final Realignment and Other Work

Upon completion of the Route 92 Separation structure, east Route 92 traffic can be shifted onto its permanent alignment from the new ENCONN and directly under the new Separation structure. Along with the ENCONN and Route 92 Separation structures, several soundwalls, a pedestrian overcrossing of I-880 at Eldridge Avenue, and other ramps and structures also will be reconstructed as part of this project.

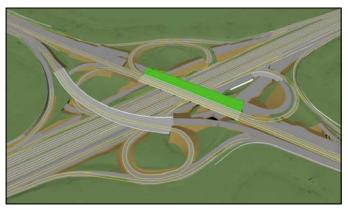
**Activity Status:** Soundwalls in the northwest and southwest quadrants of the interchange are complete. Work continues on walls in the southeast and northeast quadrants, as well as on the pedestrian overcrossing. Final realignment pending Stage 3.



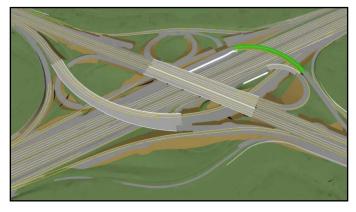
Stage 1 - Construct East Route 92 to North Interstate 880 Direct Connector



Stage 2 - Demolish and Replace South Side of Route 92 Separation Structure



Stage 3 - Demolish and Replace North Side of Route 92 Separation Structure



Stage 4 - Final Realignment and Other Work

# REGIONAL MEASURE 1 PROGRAM Other Completed Projects

# San Mateo-Hayward Bridge Widening Project Project Status: Completed 2003



This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of bridge.

Widen San Mateo-Hayward Bridge Trestle on left.

# Richmond-San Rafael Bridge Rehabilitation Projects Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed: (1) replacement of the western concrete approach trestle and ship-collision protection fender system; and (2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.



New Richmond-San Rafael Bridge West Approach Trestle under Construction

# Richmond Parkway Construction Project Project Status: Completed 2001

The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.

# New Alfred Zampa Memorial (Carquinez) Bridge Project Project Status: Completed 2003



New Alfred Zampa Memorial (Carquinez) Bridge

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin towered suspension bridge with three mixed-flow lanes, a new carpool lane, shoulders and a bicycle and pedestrian pathway.

# **Bayfront Expressway (State Route 84) Widening Project Project Status: Completed 2004**

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the U.S. 101/Marsh Road interchange by adding additional lanes and turn pockets, and improving bicycle and pedestrian access in the area.



#### **APPENDICES**

- A Toll Bridge Seismic Retrofit Program: San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail
- **B** Toll Bridge Seismic Retrofit Program Cost Detail
- C Yerba Buena Island Transition Structures (YBITS) Program Diagram
- D. Oakland Touchdown (OTD) #1 Program Diagram
- E Regional Measure 1 Program Cost Detail
- F Regional Measure 1 Program Summary Schedule
- **G** Glossary of Terms

<sup>\*</sup> Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with Risk Analysis assessments for the TBSRP Projects and the TBSRP Quarterly Reports.

### Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

### SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) EAST SPAN REPLACEMENT PROJECT COST DETAIL

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project							
East Span - Skyway	01202X						
Capital Outlay Support		197.0	(16.0)	181.0	180.8	181.0	-
Capital Outlay Construction		1,293.0	(38.9)	1,254.1	1,236.5	1,254.1	-
Total		1,490.0	(54.9)	1,435.1	1,417.3	1,435.1	-
East Span - SAS E2/T1 Foundations	0120EX	F2 F	(04 E)	24.0	20.2	24.0	-
Capital Outlay Support Capital Outlay Construction		52.5 313.5	(21.5) (32.6)	31.0 280.9	28.3 274.5	31.0 280.9	-
Total		366.0	(54.1)	311.9	302.8	311.9	_
East Span - SAS Superstructure	0120FX	000.0	(0)	011.0	002.0	011.0	
Capital Outlay Support	01201 X	214.6	_	214.6	105.6	214.6	-
Capital Outlay Construction		1,753.7	-	1,753.7	528.9	1,767.4	13.
Total		1,968.3	-	1,968.3	634.5	1,982.0	13.
SAS W2 Foundations	0120CX						
Capital Outlay Support		10.0	-	10.0	9.2	10.0	-
Capital Outlay Construction		26.4	-	26.4	25.8	26.4	-
Total		36.4	-	36.4	35.0	36.4	-
YBI South/South Detour	0120RX						
Capital Outlay Support		29.4	36.6	66.0	49.8	66.0	-
Capital Outlay Construction		132.0	310.2	442.2	233.2	461.2	19.
Total YBI Transition Structures (see notes		161.4	346.8	508.2	283.0	527.2	19.
below)	0120PX						
Capital Outlay Support	01201 X	78.7	-	78.7	21.5	78.7	-
Capital Outlay Construction		299.3	(23.2)	276.1	-	276.1	-
Total		378.0	(23.2)	354.8	21.5	354.8	-
* YBI- Transition Structures Contract							
No. 1							
Capital Outlay Support					3.4	45.0	
Capital Outlay Construction					-	214.3	
Total * YBI- Transition Structures Contract					3.4	259.3	
No. 2							
Capital Outlay Support					1.7	16.0	
Capital Outlay Construction					-	58.5	
Total					1.7	74.5	
* YBI- Transition Structures Contract							
No. 3 Landscape							
Capital Outlay Support					-	1.0	
Capital Outlay Construction					-	3.3	
Total					-	4.3	
Oakland Touchdown (see notes below)	01204X						
Capital Outlay Support		74.4	-	74.4	43.3	92.1	17.
Capital Outlay Construction		283.8	-	283.8	123.0	302.5	18.
Total		358.2	-	358.2	166.3	394.6	36.
* OTD Submarine Cable	0120K4						
Capital Outlay Support					0.9	3.0	
Capital Outlay Construction					7.9	9.6	
Total					8.8	12.6	
* OTD No. 1 (Westbound)	0120L4						
Capital Outlay Support					20.7	49.9	
Capital Outlay Construction					115.2	226.5	
Total					135.9	276.4	
* OTD No. 2 (Eastbound)	0120M4						
Capital Outlay Support					1.2	15.8	
Capital Outlay Construction					-	62.0	
Total					1.2	77.8	
* OTD Electrical Systems	0120N4						
Capital Outlay Support					0.5	1.4	
Capital Outlay Construction					-	4.4	
Total					0.5	5.8	

Notes: YBI Transition Structures and Oakland Touchdown Cost-to-Date and Cost Forecast includes prior-to-split Capital Outlay Support Costs.

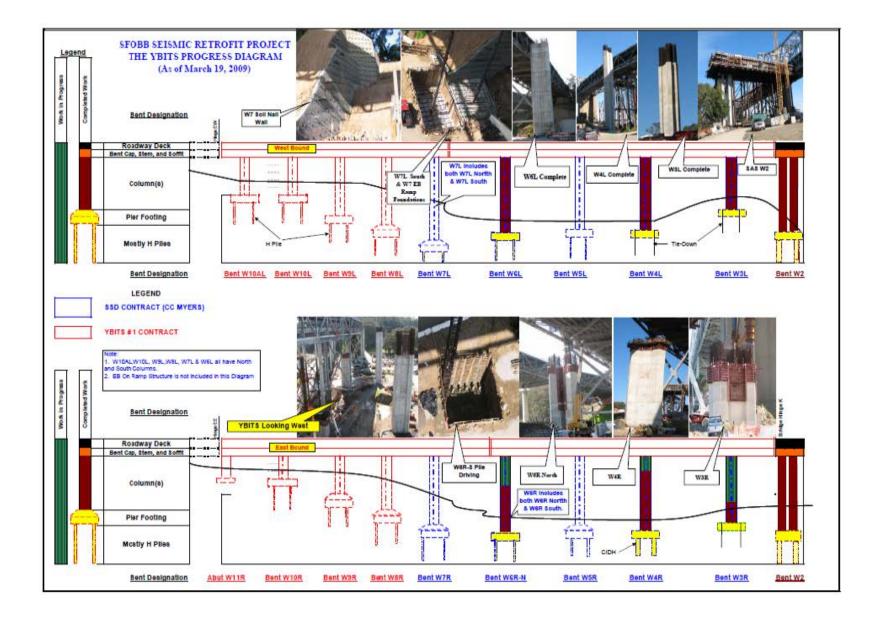
### Appendix A: Toll Bridge Seismic Retrofit Program (\$ Millions)

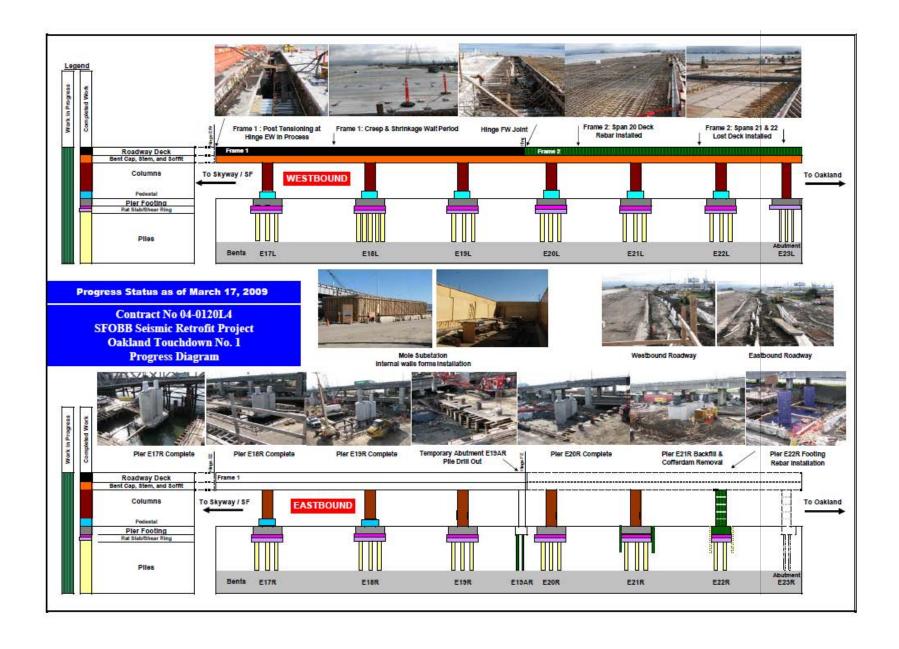
# SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) EAST SPAN REPLACEMENT PROJECT COST DETAIL (continued)

Contract	EA Number	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
а	b	С	d	e = c + d	f	g	h = g - e
Existing Bridge Demolition Capital Outlay Support Capital Outlay Construction Total	01209X	79.7 239.2 318.9	- - -	79.7 239.2 318.9	0.4 - 0.4	79.7 222.0 301.7	- (17.2) (17.2)
YBI/SAS Archeology Capital Outlay Support Capital Outlay Construction Total	01207X	1.1 1.1 2.2	- - -	1.1 1.1 2.2	1.1 1.1 2.2	1.1 1.1 2.2	- - -
YBI - USCG Road Relocation Capital Outlay Support Capital Outlay Construction Total	0120QX	3.0 3.0 6.0		3.0 3.0 6.0	2.7 2.8 5.5	3.0 3.0 6.0	- - -
YBI - Substation and Viaduct Capital Outlay Support Capital Outlay Construction Total	0120GX	6.5 11.6 18.1	- - -	6.5 11.6 18.1	6.4 11.3 17.7	6.5 11.6 18.1	- - -
Oakland Geofill Capital Outlay Support Capital Outlay Construction Total	01205X	2.5 8.2 10.7		2.5 8.2 10.7	2.5 8.2 10.7	2.5 8.2 10.7	- - -
Pile Installation Demonstration Project Capital Outlay Support Capital Outlay Construction Total	01208X	1.8 9.2 11.0		1.8 9.2 11.0	1.8 9.2 11.0	1.8 9.2 11.0	- - -
Stormwater Treatment Measures Capital Outlay Support Capital Outlay Construction Total	0120JX	6.0 15.0 21.0	2.0 3.3 5.3	8.0 18.3 26.3	7.9 16.6 24.5	8.0 18.3 26.3	- - -
Right-of-Way and Environmental Mitigation Capital Outlay Support Capital Outlay & Right-of-Way	0120X9	- 72.4	- -	- 72.4	- 39.3	- 72.4	- -
Total	04343X & (	72.4 <b>04300X</b>	-	72.4	39.3	72.4	-
Sunk Cost - Existing East Span Retrofit Capital Outlay Support Capital Outlay Construction Total		39.5 30.8 70.3	- - -	39.5 30.8 70.3	39.5 30.8 70.3	39.5 30.8 70.3	- - -
Other Capital Outlay Support Environmental Phase Pre-Split Project Expenditures Non-project Specific Costs Total		97.7 44.9 20.0 162.6	- - (1.0) (1.0)		97.7 44.9 3.2 145.8	97.7 44.9 19.0 161.6	- - -
Subtotal Capital Outlay Support		959.3	-	959.3	646.6	977.1	17.7
Subtotal Capital Outlay Construction Other Budgeted Capital		4,492.2 35.1	218.8 (3.3)	4,711.0 31.8	2,541.2 0.7	4,745.2 7.7	34.2 (24.1)
Total SFOBB East Span Replacement Project		5,486.6	215.5	5,702.1	3,188.5	5,730.0	27.9

### Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (09/2008)	Cost To Date (09/2008)	Cost Forecast (09/2008)	At-Completion Variance
a	С	d	e = c + d	f	g	h = g - e
SFOBB East Span Replacement Project						
Capital Outlay Support	959.3	_	959.3	646.6	977.1	17.8
Capital Outlay Construction	4,492.2	218.8	4,711.0	2,541.2	4,745.2	34.2
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	215.5	5,702.1	3,188.5	5,730.0	27.9
SFOBB West Approach Replacement	3,400.0	213.3	3,702.1	3,100.3	3,730.0	21.9
Capital Outlay Support	120.0	-	120.0	110.0	120.0	-
Capital Outlay Construction	309.0	24.7	333.7	292.5	350.7	17.0
Total	429.0	24.7	453.7	402.5	470.7	17.0
SFOBB West Span Retrofit	.20.0			.02.0		-
Capital Outlay Support	75.0	_	75.0	74.8	75.0	_
Capital Outlay Construction	232.9	_	232.9	227.2	232.9	_
Total	307.9	_	307.9	302.0	307.9	_
Richmond-San Rafael Bridge Retrofit	007.0		007.0	002.0	007.0	
Capital Outlay Support	134.0	(7.0)	127.0	126.7	127.0	_
Capital Outlay Construction	780.0	(90.5)	689.5	668.1	689.5	_
Total	914.0	(97.5)	816.5	794.8	816.5	_
Benicia-Martinez Bridge Retrofit	314.0	(37.0)	010.0	754.0	010.0	_
Capital Outlay Support	38.1	_	38.1	38.1	38.1	_
Capital Outlay Construction	139.7	_	139.7	139.7	139.7	_
Total	177.8	_	177.8	177.8	177.8	_
Carquinez Bridge Retrofit	177.0		177.0	177.0	177.0	
Capital Outlay Support	28.7	_	28.7	28.8	28.7	_
Capital Outlay Construction	85.5	_	85.5	85.4	85.5	_
Total	114.2	_	114.2	114.2	114.2	_
San Mateo-Hayward Bridge Retrofit	117.2		117.2	117.2	117.2	_
Capital Outlay Support	28.1	_	28.1	28.1	28.1	_
Capital Outlay Construction	135.4	_	135.4	135.3	135.4	_
Total	163.5	_	163.5	163.4	163.5	_
	100.0		100.0	100.4	100.5	
Vincent Thomas Bridge Retrofit (Los Angeles)	40.4		40.4	40.4	40.4	
Capital Outlay Support	16.4	-	16.4	16.4	16.4	-
Capital Outlay Construction  Total	42.1	-	42.1	42.0	42.1	-
	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit	00.5		00.5	00.0	00.5	
Capital Outlay Support	33.5	-	33.5	33.2	33.5	-
Capital Outlay Construction	70.0	-	70.0	69.4	70.0	-
Total	103.5	-	103.5	102.6	103.5	-
Subtotal Capital Outlay Support	1,433.1	(7.0)	1,426.1	1,102.7	1,443.9	17.8
Subtotal Capital Outlay	6,286.8	153.0	6,439.8	4,200.8	6,491.0	51.2
Subtotal Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Miscellaneous Program Costs	30.0	-	30.0	24.7	30.0	-
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	142.7	7,927.7	5,328.9	7,972.6	44.9
Program Contingency	900.0	(142.7)	757.3	-	712.4	(44.9)
Total Toll Bridge Seismic Retrofit Program	8,685.0	-	8,685.0	5,328.9	8,685.0	-





### Appendix E: Regional Measure 1 Program Cost Detail (\$ Millions)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (02/2009)	Cost To Date (02/2009)	Cost Forecast (02/2009)	At-Completion Variance
а	b	С	d	e = c + d	f	g	h = g - e
Novo Ponisio Modinos Poldos Postos							
New Benicia-Martinez Bridge Project	00603						
New Bridge	00003_	04.0	0.7	04.0	04.7	04.0	
Capital Outlay Support		84.9	6.7	91.6	91.7	91.6	-
Capital Outlay Construction		004.0	04.0	-	750.0	7505	-
BATA Funding		661.9	94.6	756.5	753.8	756.5	-
Non-BATA Funding		10.1	-	10.1	10.1	10.1	-
Subtotal		672.0	94.6	766.6	763.9	766.6	-
Total		756.9	101.3	858.2	855.6	858.2	-
I-680/I-780 Interchange Reconstruction	00606						
Capital Outlay Support	_						
BATA Funding		24.9	5.2	30.1	30.1	30.1	_
Non-BATA Funding		1.4	5.2	6.6	6.3	6.6	_
Subtotal		26.3	10.4	36.7	36.4	36.7	_
Capital Outlay Construction		20.0	10.1	00.7	00.1	00.1	
BATA Funding		54.7	26.9	81.6	77.1	81.6	_
Non-BATA Funding		21.6	20.9	21.6	21.7	21.6	-
							-
Subtotal		76.3	26.9	103.2	98.8	103.2	-
Total		102.6	37.3	139.9	135.2	139.9	-
I-680/Marina Vista Interchange							
Reconstruction	00605						
Capital Outlay Support		18.3	1.8	20.1	19.9	20.1	-
Capital Outlay Construction		51.5	4.9	56.4	56.1	56.4	-
Total		69.8	6.7	76.5	76.0	76.5	_
New Toll Plaza and Administration Building	00604						
Capital Outlay Support	_	11.9	3.8	15.7	15.7	15.7	_
Capital Outlay Construction		24.3	2.0	26.3	23.6	26.3	_
Total		36.2	5.8	42.0	39.3	42.0	_
lotai		00.2	0.0	72.0	00.0	72.0	
Existing Bridge & Interchange Modifications	0060A_						
Capital Outlay Support		4.3	14.3	18.6	14.7	18.6	-
Capital Outlay Construction							
BATA Funding		17.2	32.8	50.0	21.1	50.0	-
Non-BATA Funding		-	9.5	9.5	-	9.5	-
Subtotal		17.2	42.3	59.5	21.1	59.5	-
Total		21.5	56.6	78.1	35.8	78.1	-
Other Contracts	See note below						
	See Hote below	11.4	(4.0)	9.6	7.7	9.6	
Capital Outlay Support			(1.8)				-
Capital Outlay Construction		20.3	2.8	23.1	16.5	23.1	-
Capital Outlay Right-of-Way		20.4	(0.1)	20.3	17.0	20.3	-
Total		52.1	0.9	53.0	41.2	53.0	-
Subtotal BATA Capital Outlay Support		155.7	30.0	185.7	179.8	185.7	-
Subtotal BATA Capital Outlay Construction		829.9	164.0	993.9	948.2	993.9	-
Subtotal Capital Outlay Right-of-Way		20.4	(0.1)		17.0	20.3	-
Subtotal Non-BATA Capital Outlay Support		1.4	5.2	6.6	6.3	6.6	_
Subtotal Non-BATA Capital Outlay Support	ion	31.7	9.5	41.2	31.8	41.2	_
. ,	IUII				31.8		-
Project Reserves		20.8	4.0	24.8	-	24.8	-
Total New Benicia-Martinez Bridge Project		1,059.9	212.6	1,272.5	1,183.1	1,272.5	_
Total New Defilcia-Waltillez Bridge Project		1,005.5	212.0	1,212.3	1,103.1	1,212.3	-

Notes:

Includes EA's 00601\_,00603\_,00605\_,00606\_, 00608\_, 00609\_, 0060A\_, 0060C\_, 0060E\_, 0060F\_, 0060G\_, and 0060H\_ and all Project Right-of-Way

#### Appendix F: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (02/2009)	Cost To Date (02/2009)	Cost Forecast (02/2009)	At-Completion Variance
а	b	С	d	e = c + d	f	g	h = g - e
Carquinez Bridge Replacement Project							
New Bridge	01301_						
Capital Outlay Support		60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction		253.3	4.0	257.3	255.9	257.3	-
Total		313.8	3.7	317.5	316.1	317.5	-
Crockett Interchange Reconstruction	01305_						
Capital Outlay Support		32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction		73.9	- '	73.9	71.9	73.9	-
Total		105.9	(0.1)	105.8	103.8	105.8	-
Existing 1927 Bridge Demolition	01309						
Capital Outlay Support	_	16.1	-	16.1	15.5	15.5	(0.6)
Capital Outlay Construction		35.2	-	35.2	34.8	35.2	-
Total		51.3	-	51.3	50.3	50.7	(0.6)
Other Contracts	See note below						
Capital Outlay Support		15.8	0.2	16.0	16.3	16.3	0.3
Capital Outlay Construction		18.8	(8.0)	18.0	16.1	18.1	0.1
Capital Outlay Right-of-Way		10.5	` - '	10.5	9.9	10.5	-
Total		45.1	(0.6)	44.5	42.3	44.9	0.4
Subtotal BATA Capital Outlay Support		124.4	(0.2)	124.2	123.9	123.9	(0.3)
Subtotal BATA Capital Outlay Construction		381.2	3.2	384.4	378.7	384.5	0.1
Subtotal Capital Outlay Right-of-Way		10.5	J.Z	10.5	9.9	10.5	0.1
Project Reserves		12.1	(3.0)	9.1	-	0.3	(8.8)
		12.1	(0.0)	0.1		0.0	(0.0)
Total Carquinez Bridge Replacement Project		528.2	-	528.2	512.5	519.2	(9.0)

Notes:

Other Contracts includes EA's 01301\_,01302\_, 01303\_,01304\_,01305\_, 01306\_, 01307\_, 01308\_, 01309\_,0130A\_, 0130C\_, 0130D\_, 0130F\_, 0130G\_, 0130H\_, 0130J\_, 00453\_, 00493\_, 04700\_, 00607\_, 2A270\_, and 29920\_ and all Project Right-of-Way

### Appendix F: Regional Measure 1 Program Cost Detail (\$ Millions) (Continued)

Project	EA Number	BATA Budget (07/2005)	Approved Changes	Current Approved Budget (02/2009)	Cost To Date (02/2009)	Cost Forecast (02/2009)	At-Completion Variance
a	b	С	d	e = c + d	f	g	h = g - e
Richmond-San Rafael Bridge Trestle, Fender,							
and Deck Joint Rehabilitation	See note 1 belo	ow					
Capital Outlay Support							
BATA Funding		2.2	-	2.2	1.4	2.2	-
Non-BATA Funding		8.6	-	8.6	10.4	10.4	1.8
Subtotal		10.8	-	10.8	11.8	12.6	1.8
Capital Outlay Construction							
BATA Funding		40.2	-	40.2	33.4	33.4	(6.8)
Non-BATA Funding		51.1	-	51.1	51.1	51.1	- (0.0)
Subtotal Project Reserves		91.3	_	91.3	84.5	84.5	(6.8)
Total		102.1	-	102.1	96.3	97.1	(5.0)
Pick was discounted by the Point Counter							
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	04152						
Capital Outlay Support	04132_						
BATA Funding		4.0	(0.4)	3.6	3.3	3.6	_
Non-BATA Funding		4.0	(4.0)	-	-	3.0	-
Subtotal		8.0	(4.4)	3.6	3.3	3.6	-
Capital Outlay Construction		16.9	3.6	20.5	16.3	16.2	(4.3)
Project Reserves		0.1	0.8	0.9	-	5.2	4.3
Total		25.0	-	25.0	19.6	25.0	-
Richmond Parkway Project (RM 1 Share Only)	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction		5.9	-	5.9	4.3	5.9	-
Total		5.9	-	5.9	4.3	5.9	-
San Mateo-Hayward Bridge Widening	See note 2 belo						
Canital Outlay Sunnart	See note bel		(0.2)	24.2	34.1	242	
Capital Outlay Support Capital Outlay Construction		34.6 180.2	(0.3)	34.3 180.2	34.1 174.1	34.3 176.2	(4.0)
Capital Outlay Right-of-Way		1.5	-	1.5	0.5	0.6	(0.9)
Project Reserves		1.5	0.3	1.8	-	0.8	(1.0)
Total		217.8	-	217.8	208.7	211.9	(5.9)
I-880/SR-92 Interchange Reconstruction	EA's 23317_, 0	1601 . and 01	602				
Capital Outlay Support	_,	28.8	26.2	55.0	45.5	55.0	-
Capital Outlay Construction		85.2	60.2	145.4	FG 7	115 1	
BATA Funding Non-BATA Funding		9.6	60.2	9.6	56.7	145.4 9.6	-
Subtotal		94.8	60.2	155.0	56.7	155.0	-
Capital Outlay Right-of-Way		9.9	7.0	16.9	11.6	16.9	_
Project Reserves		0.3	17.8	18.1	-	18.1	-
Total		133.8	111.2	245.0	113.8	245.0	-
Bayfront Expressway Widening	EA's 00487_, 0	1511 . and 01	512				
Capital Outlay Support	, -	8.6	(0.3)	8.3	8.3	8.2	(0.1)
Capital Outlay Construction		26.5	-	26.5	24.9	26.5	`- ′
Capital Outlay Right-of-Way		0.2	-	0.2	0.2	0.2	-
Project Reserves		8.0	0.3	1.1	-	1.1	-
Total		36.1	-	36.1	33.4	36.0	(0.1)
US 101/University Avenue Interchange							
Modification	Non-Caltrans						
Capital Outlay Support		-	-	-	-	-	-
Capital Outlay Construction Total		3.8 3.8	-	3.8 3.8	3.7 3.7	3.8 3.8	-
			FF 0				(0.4)
Subtotal BATA Capital Outlay Support Subtotal BATA Capital Outlay Construction		358.3 1,569.8	55.0 231.0	413.3	396.3 1,640.3	412.9 1 785.8	(0.4)
Subtotal Capital Outlay Right-of-Way		42.5	6.9	1,800.8 49.4	39.2	1,785.8 48.5	(15.0) (0.9)
Subtotal Non-BATA Capital Outlay Support		14.0	1.2	15.2	16.7	17.0	1.8
Subtotal Non-BATA Capital Outlay Construct	ion	92.4	9.5	101.9	82.9	101.9	-
Project Reserves Total RM1 Program		35.6	20.2	55.8	2,175.4	50.3	(5.5)

Notes:

 $<sup>^1</sup>$  Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U $_{-}$  and 04157 $_{-}$ 

#### Appendix G: Glossary of Terms

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

**BATA BUDGET:** The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

**CURRENT APPROVED BUDGET:** The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

**COST TO DATE**: The actual expenditures incurred by the program, project or contract as of the month and year shown.

**COST FORECAST:** The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

**AT COMPLETION VARIANCE or VARIANCE (cost):** The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

**BATA PROJECT COMPLETE BASELINE**: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

**PROJECT COMPLETE CURRENT APPROVED SCHEDULE**: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

**PROJECT COMPLETE SCHEDULE FORECAST:** The current projected date for the completion of the program, project, or contract.

**SCHEDULE VARIANCE or VARIANCE (schedule):** The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

The following information is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.73.



### Memorandum

TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4a1

San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island (YBI) Ramps

#### **Recommendation:**

For Information Only

#### **Cost:**

N/A

#### **Schedule Impacts:**

N/A

#### **Discussion:**

On April 2, representatives from the City/ County of San Francisco will provide the TBPOC a briefing on the Yerba Buena Island (YBI) Ramps Project, as it relates to the YBITS No. 1 contract. Representatives will include:

- Jack Sylvan, Mayor's Office
- Kyri McClellan Mayor's Office
- Eileen Goodwin consultant to Mayor's Office
- Rodney Pimentel AECOM, PA/ED consultant to SFCTA
- Jose Luis Moscovich Executive Director, SFCTA (tentative)
- Eric Cordoba SFCTA YBI Ramps Project Manager

#### Attachment(s):

YBI Ramps Project - TBPOC Presentation, as of March 23, 2009



# YERBA BUENA ISLAND RAMPS PROJECT





### **AGENDA**

- Background
- Geometry Concept Review
- Goal Include YBI Ramps Project in YBITS2
- Schedule
- YBITS 1 Addendum
- Project Funding
- YBI Bike/Pedestrian Circulation
- Architectural Design



## **Background**

- Conceptual Feasibility Report dated March 2002
- Caltrans Project Study Report, Dec 19, 2007
- Draft EIR/EIS, Oct 2009
- Final EIR/EIS, April 2010



# **Current Project (YBI Ramps)**

### 3 Alternatives

- No Build
- Alternative 2B
- Alternative 4



## **Alternative 2B – Preferred**





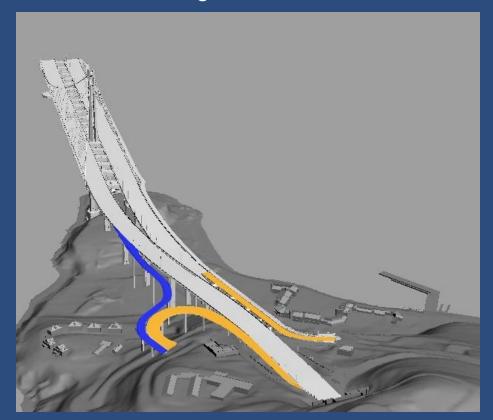
## **Alternative 4**





## **Goal - Include YBI Ramps in YBITS 2 Contract to:**

- Minimize Cost & Complexity of Delivering Ramps
- Deliver Better Ramps As Soon As Possible
  - WB Off-Ramp Standard Deceleration length
  - WB On-Ramp Better Acceleration length
    - 200' existing
    - 720' proposed





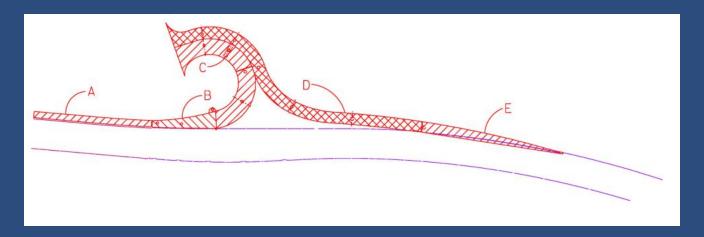
## **Project Schedule**

- April 9, 2009 Issue Addendum to Caltrans
- Oct, 2009 Draft ED
- April, 2010 Final ED
- Mar, 2011 Final PS&E to HQOE
- Aug 2011 Advertise YBI Ramps with YBITS 2
- Jan 2012 Open Bids for YBI Ramps and YBITS 2
- Apr 2012 Begin Construction YBI Ramps and YBITS 2



### **YBITS 1 Addendum**

- YBI Ramps separated into 5 different structure packages
- Structure packages B & E attach to YBITS 1
- Addendum will add essential reinforcement for YBI Ramps
- Reinforcement will not impact YBITS 1 structure
- Not adding reinforcement will greatly impact cost and aesthetics of the YBI Ramps





# **YBI Ramps Project Funding**

- PSR, locally \$600k
- PA/ED, locally \$2.5M
- PS&E, locally \$12M
- Construction
  - \$18M Prop 1B
  - \$ 52M Federal & State

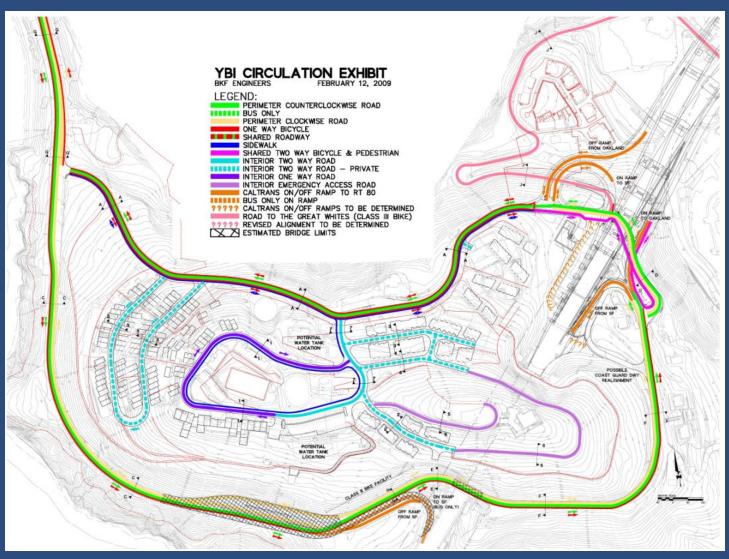


## Comprehensive Bike/Ped network on YBI

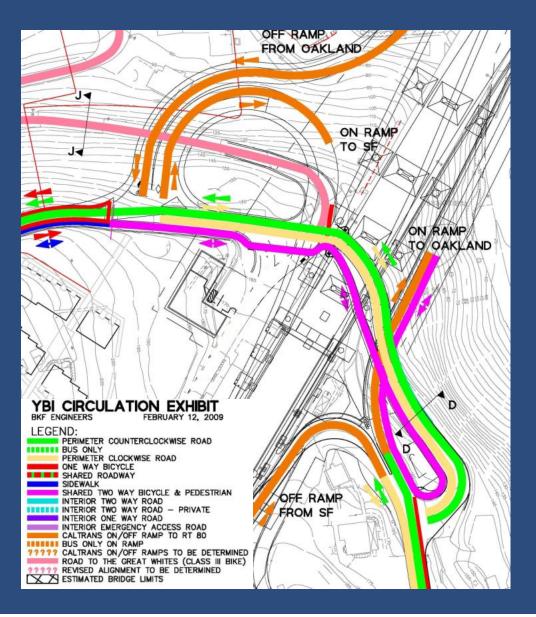
- Caltrans
- Treasure Island Development Authority
- San Francisco Bay Trail
- San Francisco Bicycle Coalition
- Bay Conservation and Development Commission



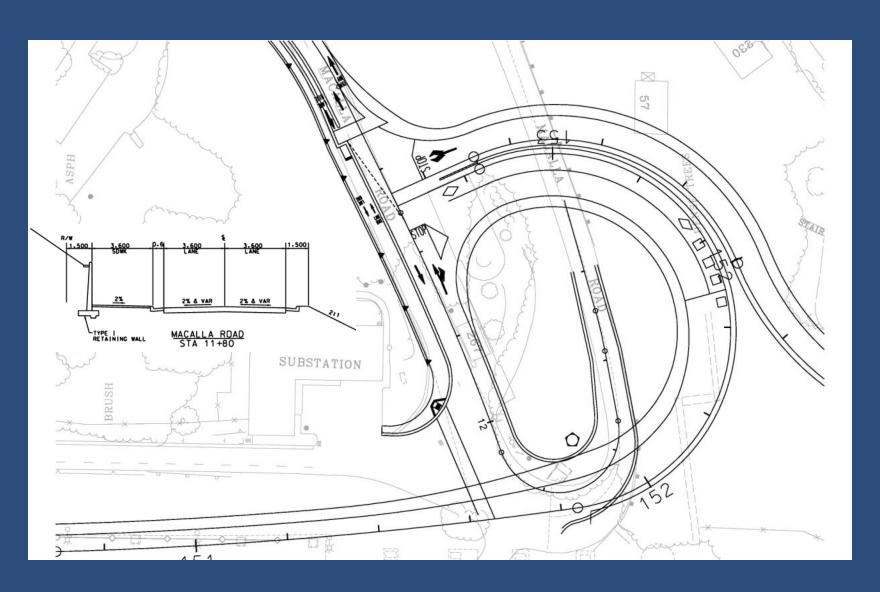
# **Proposed YBI Bike/Pedestrian Circulation**



### Bike/Pedestrian Transition to Island



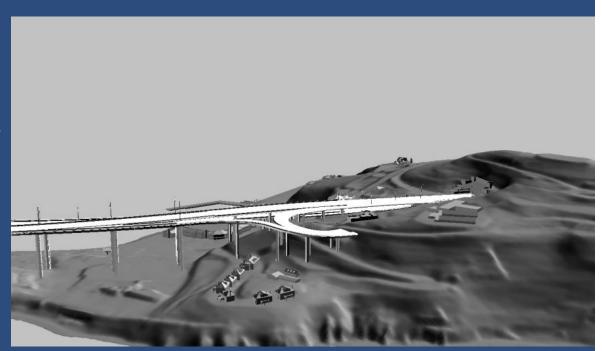
# **Terminus of Ramps**





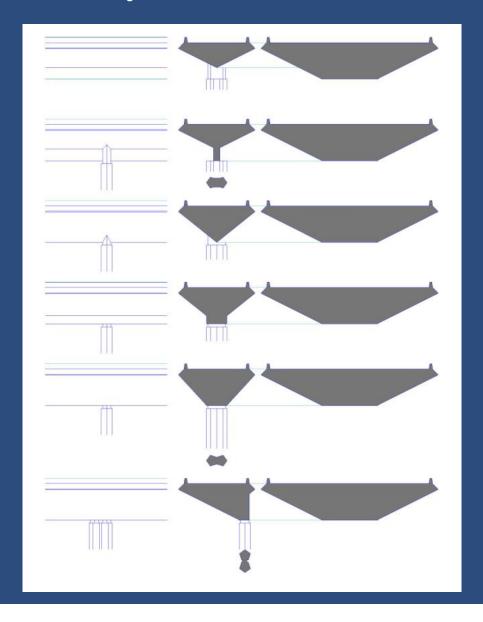
# Architectural Design

- Relate the new structures to the bridge as a whole
- Ensure design continuity and order
- No new vocabulary
- Provide detail that reinforces and enhances structural elements





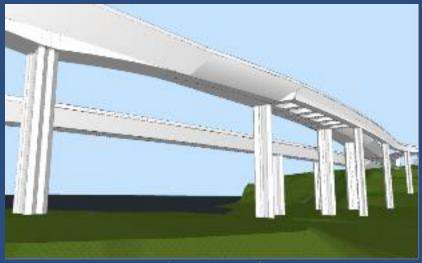
# Consistency with Form



"The design should be so refined that no element can be added or removed without disturbing the harmony of the whole."

 Excerpts from BCDC DRB / EDAP Design Criteria April 1997

# Consistency with Transition



Intersect/Design Challenge



Solution 2



Solution 1



Solution 3

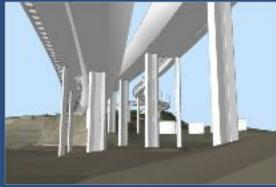
## Preferred Architectural Solution



Looking north



Looking northwest



Looking west



Looking southwest



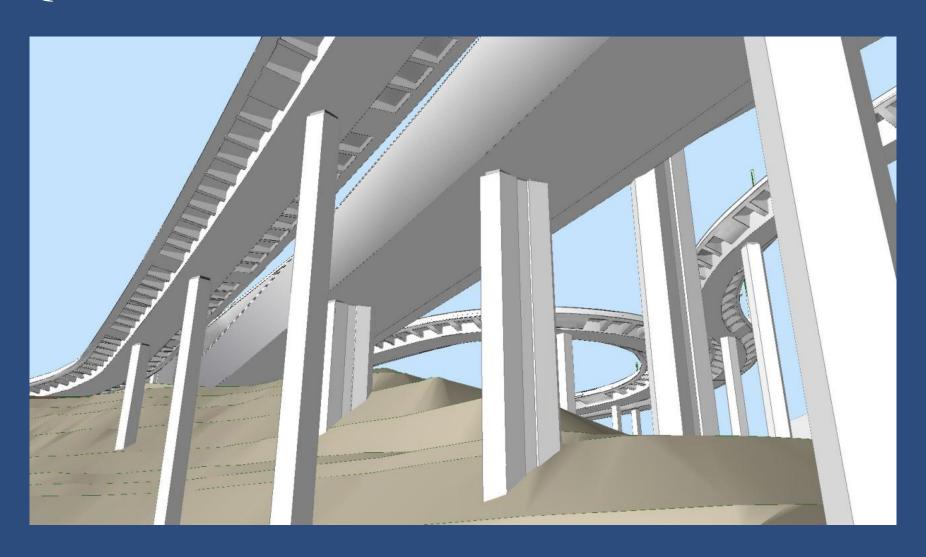
Looking south



Looking south

"The new bridge should achieve a clean and well-defined anatomical construction, devoid of any deception and unnecessary detail."

# Questions and Answers





#### Memorandum

TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Mike Forner, Construction Manager, Caltrans

RE: Agenda No. - 4b1

Item- San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island Detour

Partial Demolition of Structures (Pier YB4 to Bent 48)

#### **Recommendation:**

For Information Only

#### **Cost:**

N/A

#### **Schedule Impacts:**

Schedule alternatives for the YBI-Detour contract completion and the YBITS #1 contract construction were reviewed in context with the SAS approved scheduled dates for Phase1 (Hinge K), 2 (Westbound open), and 3 (Eastbound open) milestone completion. There were 5 alternatives analyzed, and they are attached for your reference.

#### **Discussion:**

The original YBI-Detour contract included the demolition of the existing structure from Bent 48 through YB4. The nature of this demolition was changed with the introduction of the ETI roll-out / roll-in and the YBITS advanced work. Staff has been working with the YBID contractor since late 2008 on options to demolish the existing structure. Due to the nature of the rolled out YB4 structure, it was universally agreed that that portion would be addressed as part of the ETI work. At the same time, the TBPOC wanted to know other options available to accomplish demolition of Bent 48 through YB3, and subsequent completion of the remaining YBITS advanced work.

Attached with this memo are two documents; the first document includes 5 schedule options relating to the YBI-Detour contract completion and the YBITS #1 contract construction in context with SAS milestones.



#### Memorandum

**Schedule Options** 

Schedule	Construction	Cost	Schedule Float	Comments
Option	Contract	Cost	(SAS Milestones)	Comments
1	YBID	\$18M	+6	YBID contract and has an accelerated
				project completion date of April 2010
2	YBID	\$13M	+3	<ul> <li>YBID contract and has a project</li> </ul>
				completion date of August 2010
3	YBITS #1	\$8M*	-4	• Adds work to YBITS #1 by addendum
4	YBITS #1	\$8M*	-2	• Adds work to YBITS #1 by addendum
				• Introduces cost plus bid item for
				demolition and remaining advanced
				work
5	YBITS #1	\$8M*	-1	• Adds work to YBITS #1 by addendum
				• Introduces cost plus bid item for
				demolition
				Has accelerated schedule for demo

<sup>\*</sup>This is only an estimate, as this work has not yet been bid.

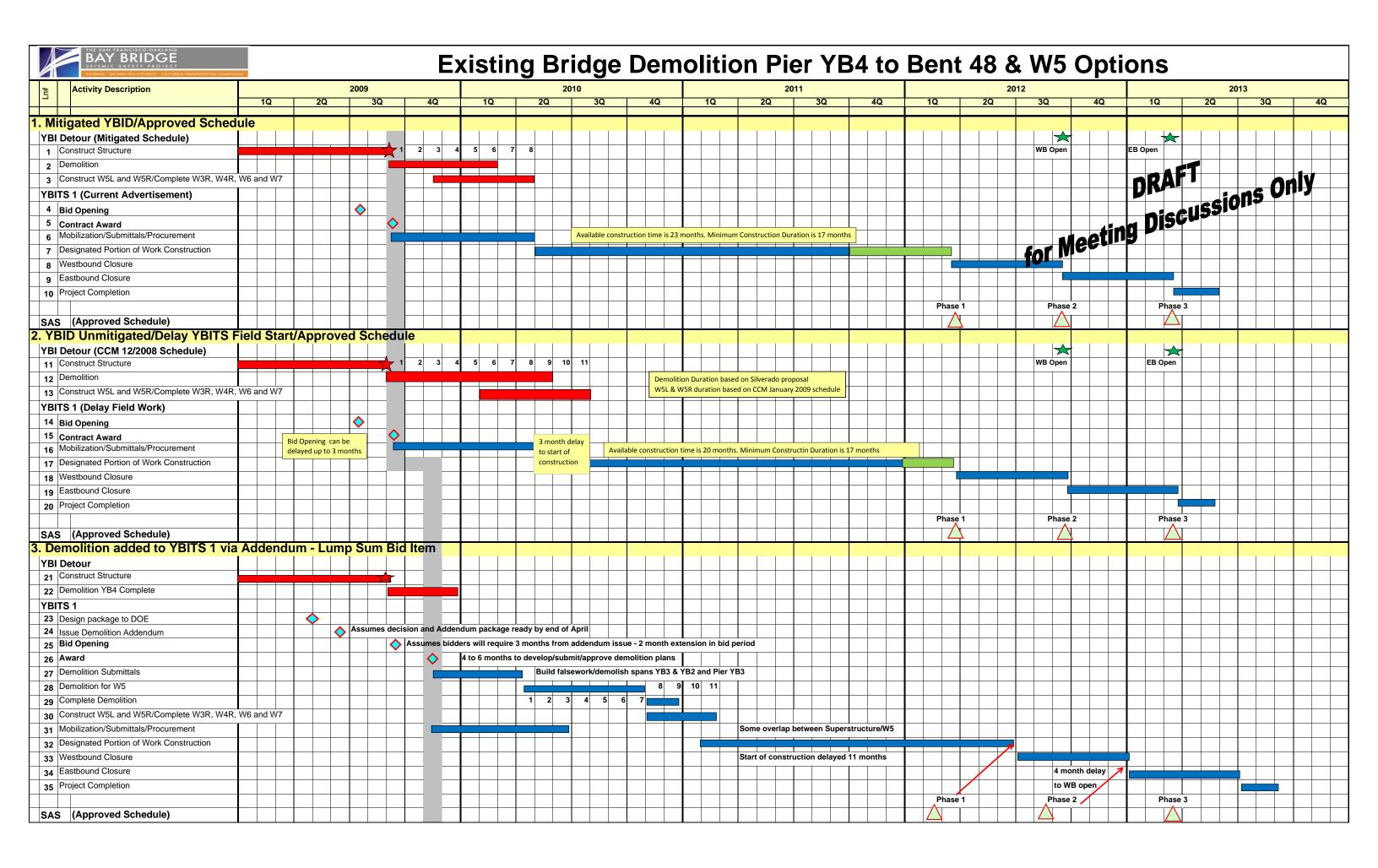
#### Risk Assessment

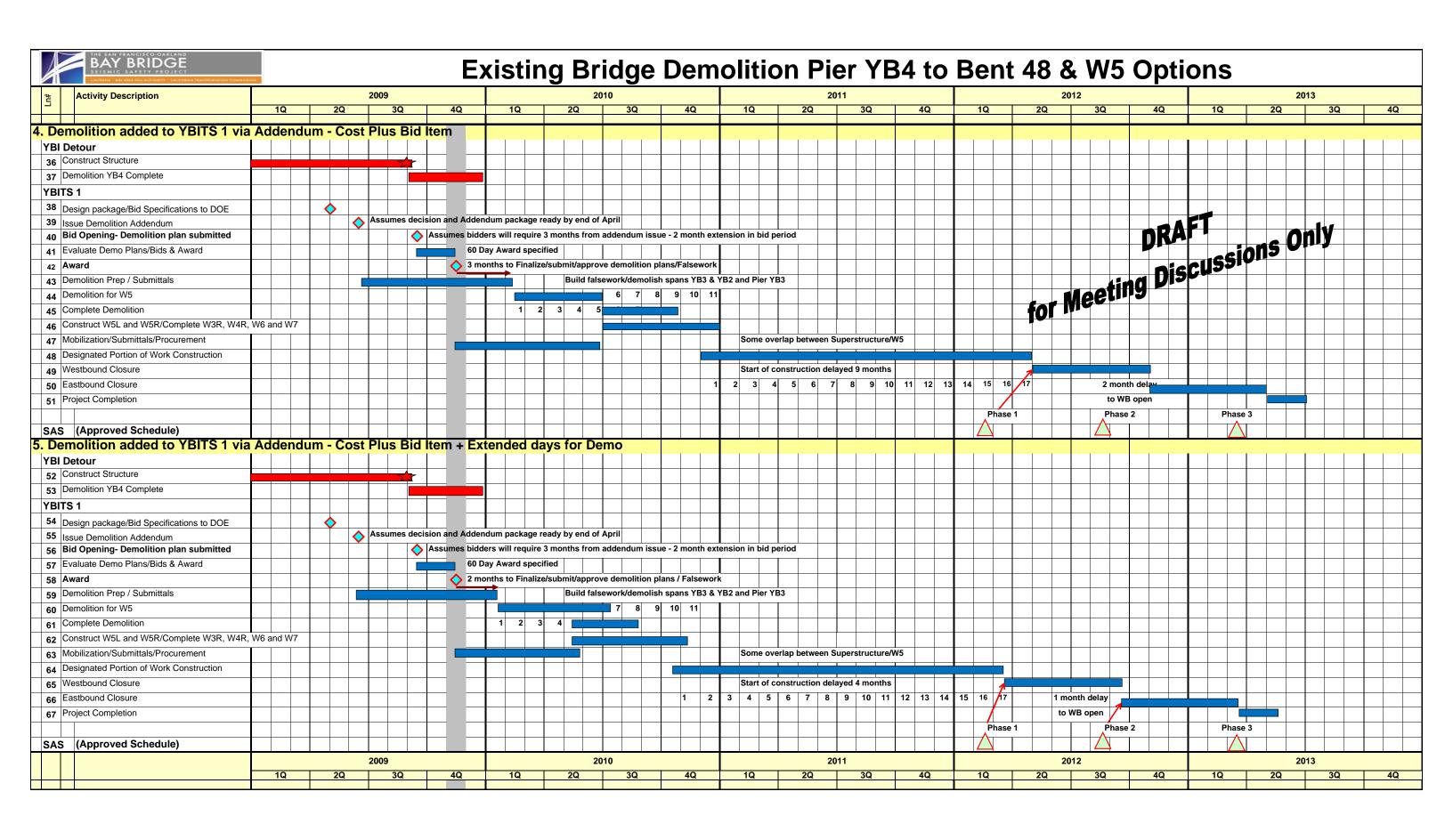
The second attachment includes a review of risk assessment associated with keeping the demolition and remaining advanced work with the current YBID contractor or removing this work from their contract and using other procurement methods to complete this work. This spreadsheet weighs the pros and cons of each option, i.e., continue with the work in the YBID contract or move it to the YBITS #1 contract. This exercise shows that from a strictly cost risk perspective that either option is about the same.

However, when you take schedule risk to delaying SAS into consideration, the options become clearer.

#### Attachment(s):

- 1. Existing Bridge Demolition Pier YB4 to Bent 48 & W 5 Options
- 2. Comparing Cost, Risks and Opportunities on Demo w/CCM vs. Bid





## Comparing Cost, Risks and Opportunities on Demo w/CCM vs. Bid

 $\underline{\text{Scope of Work:}} \ \text{Demo \& W5, completion of half built W5R, W6RS, W7L and two thirds built W3R.}$ 

Goal: to assess potential savings that might be gained by moving work out of the YBITS, against the risk of delaying the traffic opening (hard to put \$\$\$ on this)

#### Assumptions in Base Case:

Cost variance is compared to Traina's most up to date estimate: Approx \$12 million (5x8hr @ 225 days), the work was original bid @ \$3.5 million, this estimate would have project completion November 1 2010.

Assuming SAS gets complete by Contract Completion date, Schedule of Traffic Openning could be delayed if Demo & D5 are included in YBITS by 6 months optimistic, 9 months most likely and 12 months pessimistic.

Assumptions: 1. All info to OE by mid-April 2009, 2. Addendum issued by mid-June 2009, 3. Since Demo is now new type work 8 more weeks to bid, 3. 4-6 months for design, submit and approve demo plans.

Continue in YBID Contract					Include in YBITS Contract Option or Cost Plus B	Bid Item	Uroh	
		Probab					abilit	
Description of Risk/Opportunity	Cost Rational		Probable Cost		Description of Risk/Opportunity	Cost Rational	,	Probable Cos
Risk 39: Demo more complex then envisioned	From Risk Register	50% \$5-\$10mil	\$3,750,000	1	Risk 39: Demo more complex then envisioned	From Risk Register	50% \$5-\$10 mil	\$3,750,00
Risk 55:Maintaining relations with the Coastquard	From Risk Register	50% \$600k-\$1.8mi	\$600,000	2	Opportunity to save if Demo Bid	Savings from Base Case \$12 mill, team thinks high prob of \$4-6 mill	90% \$4-6 mil	-\$4,500,00
Risk 60: Extra Cost Risk over and above Traina's \$12 mill	Reflects lump-sum price given to Caltrans on 3/13	100% \$0-\$1mil	\$500,000	3	Opportunity to save if W5 and remainder of W5R, W6RS, W7L & W3R are rebid.	W5=\$5.4 mill and rest=\$3.6 mill or \$9mil total, assume 10-30% savings	90% \$0.9-\$2.7	-\$1,600,00
				4	Opportunity to save if prices of strap steel increase	Very Low probability that prices will improve in the current economic environment.	10% 500,000	-\$50,00
			21	5	Sunk Cost in CCOs for work to be deleted, ie B5 (L&R) in CCO#73 and			
					other four column and piling.	/		
					Sunk Cost in B5 (L&R) in CCO#73	Credit in CCO = \$5.367, very low prob contractor could claim costs	10% 500,000	
				b	Sunk Cost in half built W5R, W6RS, W7L and two third built W3R.	Need to negotiate credit for incomplete columns, approx \$3.6 million with approx \$500k (\$1mill with 50% chance of recovery) in sunk cost of forms.	100% \$1-\$2 mil	\$1,500,00
			$I \wedge \Lambda$	C	Sunk costs in Bt 5 Piling(only 25% driven)	Need to compensate CCM for furnish, storing and handling piling and negoiate credit for incomplete work.	100% \$400k-\$80	\$600,00
				6	Sunk costs associated with deleting item work	Silverado costs of Engineering, Estimate and Equipment: approx 15% of original \$3.5 mill, plus minor CCM costs	100% 600,000	\$600,00
			W	7	Sunk costs associated with deleting extra work.	CCM has additional engineering falsework costs and Silverado has additional Engineering and esimating costs, paid under CCO #65 for \$200,000	100% 200,000	\$200,00
				8	Legacy issues inherited by New Contractor (chain of control of materials)			
				а	Partially Complete rebar cages	Cages damaged on transfer	50% 100,000	\$50,00
				b	Coupler Problems	Coupler pairs damaged or mismatched	30% 500,000	
					Tolerance issues		30% 200,000	\$60,00
				d	Matching Concrete: Different suppliers	Incompatability in Concrete Colour, leads to designation of supplier or aggregate	70% 100,000	\$70,00
				_	Risk in defining on paper what is known by CCM			
				а	Dealing with the Coastguard	Traffic handling and meeting max 15 minute closure on Machalla Rd could have low	90% 1,400,000	\$1,260,00
				b	Cooperating with ABF	bid Contractor claiming ineffiencies, ie 20% ABF shouldn't have much going on during this timeframe, 10% inefficient with	50% 700,000	\$350,00
				c	Accuracy of As-Builts: Plans don't reflect complexity of site geometry	medium probability.  Geometry complexity could have low bid contractor claiming ineffiencies, ie 15%	70% 1,000,000	\$700,00
				10	Extra COS costs			
				а	OE Costs of moving work into YBITS package	3 guys 2 months	100% 150,000	\$150,00
				b	Demo review and approval now on critical path	4 months COS on YBITS: \$2k/day	100% 160,000	\$160,00
				11	Risk of TRO cost delta	TRO on CCM costs us actual costs vs. New Guy w/profit: \$2,000 for 225 days	70% 250,000	\$175,00
				12	CCM and New Contractor need to share same space	Scheduler believes that CCM will be gone Jan 2010, prior to new contractor startnig field work	0% 350,000	\$
				13	Less Effeciency on remaining work, i.e. YB4	\$5-6 mill in YB4 work could have 20% ineffeciency	70% \$1-\$1.2mi	\$770,00
Totals*		Total	\$4,850,000				Total	\$4,445,00
Costs are for comparative purposes: not meant to b	e absolute				Costs are for comparative purposes: not meant to be absolute			



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Dina Noel, Assistant Deputy Director, CTC

RE: Agenda No. - 4b2

Item- San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island Detour Contract Change Order 65, S1 -

Partial Demolition of Existing SFOBB

## **Recommendation:**

**APPROVAL** 

#### Cost:

CCO 65 - Supplemental 1: \$9,227,660

## **Schedule Impacts:**

The YBI-Detour contract completion is targeted for Fall 2010. The bridge opening target date is not impacted by this request. The work covered in this contract change will be conducted in conjunction with Span YB4 demolition and W5 construction activities.

#### **Discussion:**

Contract Change Order 65 - Supplemental 1 in the amount of \$9,227,660 compensates the contractor for labor, equipment, and material costs incurred to remove the existing structure from Bent 48 to Bent YB4. It also provides for additional construction measures to work around and protect the YBITS advanced newly constructed columns, structures, and facilities.

Payment for this change shall be performed at the agreed lump sum of \$9,227,660 financed through the project contingency fund. This change constitutes full and equitable resolution for all issues, disputes and potential claims related to the demolition of the existing structure from Bent 48 to Bent YB4.

Attached is related information detailing the draft and approved CCOs, CCOs memoranda, and the updated YBI Detour Implementation Strategy document.



## **Attachment(s):**

- 1. Draft CCO 65 S1
- 2. Draft CCO 65 S1 Memorandum
- 3. Approved CCO 65 and CCO 65 Memorandum
- 4. YBI Detour Implementation Strategy document

## CONTRACT CHANGE ORDER

Change Requested by:

Engineer

CCO 65

Suppl. No. 1

Contract No. 04 - 0120R4

Road SF-80-12.6/13.2

FED. AID LOC.: ACBRIM-080-1(097)N

To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.** 

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

#### Estimate of Decrease in Contract Item at Contract Price:

Item No. 40: BRIDGE REMOVAL

-1LS

(-100.00%)

3,500,000.00 /LS

=-\$3,500,000.00 (-100.00%)

The contractor agrees that the adjustment due under Section 4-1.03B, Eliminated Items, of the Standard Specifications for the elimination of Contract Bid Item 40: Bridge Removal shall be equal to zero.

Total Cost for Decrease in Contract Item.....(\$3,500,000.00)

#### **Extra Work at Lump Sum:**

Compensate the contractor for all additional labor, equipment and material costs incurred to remove the existing structure from Bent 48 to Bent YB4, as a result of changed field conditions, escalation and delays. The contractor agrees to accept the lump sum of \$12,727,660 as full compensation, including all markups, surcharges and profit, for all additional costs necessary to complete this work unless otherwise delineated in this change. The aforementioned lump sum shall include compensation for:

- 1. All labor, equipment and material escalation costs.
- 2. All Silverado Contractors time-related overhead costs.
- 3. Loss of anticipated revenue resulting from changes in steel and concrete salvage market prices.
- 4. Furnishing, installing, relocating, storing and removing all temporary supports systems.

The aforementioned lump sum shall include compensation for costs involved in working around, protecting, and repairing newly constructed columns, structures and facilities constructed under contract change orders 64, 73, 75 and 77.

It is expressly understood and agreed that the following work shall be compensated as provided under various existing and/or anticipated Contract Change Orders and applicable Contract Bid Items:

- 1. Flagging.
- 2. Traffic control
- 3. Storm water pollution prevention compliance.
- 4. Engineering associated with temporary support design and bridge removal plan.
- 5. Furnishing and placing additional backfill as required at W5 footings.

If required by the Engineer, installation and removal of cable bracing system at the upper deck, and displacement monitoring of the temporary support system shall be paid for under a separate change order.

The contractor agrees to accept the compensation outlined in this change as full, complete and equitable resolution for all issues, disputes and potential claims related to the demolition of the existing structure from Bent 48 to Bent YB4. No furthe compensation shall be allowed.

Total Cost of Extra Work at Lump Sum ......\$12,727,660.00

**CONTRACT CHANGE ORDER** 

Change Requested by:

Engineer

CCO 65 Suppl. No. 1 Contract No. 04 - 0120R4 Road SF-80-12.6/13.2 FED. AID LOC.: ACBRIM-080-1(097)N

	Estimated Cost: Increase 🗹 Decrease	<u> </u>
By reason of this order the time of completion will Submitted by	be adjusted as follows: Deferred	
Signature	Resident Engineer BILL CASEY	Date
Approval Recommended by		
Signature	SFOBB Construction Manager MIKE FORNER	Date
Engineer Approval by		
Signature	SFOBB Construction Manager  MIKE FORNER	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date
	•	1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

## CONTRACT CHANGE ORDER MEMORANDUM

				· · · · · · · · · · · · · · · · · · ·	
TO: MIKE FORNER /	DEANNA VILCHECK		FILE: E.A.	04 - 0120R4	
			CO-RTE-PM	SF-80-12.6/13.2	
FROM: BILL CASEY			FED. NO.	ACBRIM-080-1(097)N	
CCO#: 65 SUPPLEMENT#: 1 Category Code: CHPT			CONTINGENCY	BALANCE (incl. this cha	nge) <b>\$59,303,131.05</b>
COST: \$9,227,660.00 INCREASE ☑ DECREASE □			HEADQUARTER	S APPROVAL REQUIRE	ED? YES NO
SUPPLEMENTAL FUNDS	PROVIDED:	\$0.00		ST IN ACCORDANCE W AL DOCUMENTS?	ITH VES NO
CCO DESCRIPTION:			PROJECT DESCRIPTION:		
Bridge Removal From Ber	nt 48 to YB3		CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE		
Original Contract Time:  Time Adj. This Change:  Previously Approved Continue Adjustments:			tage Time Adjusted: ng this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)	
<b>475</b> Day(s)	DEF D	ay(s) 1195 Da	ıy(s)	<b>252</b> %	8

DATE: 3/19/2009

Page 1 of 2

#### THIS CHANGE ORDER PROVIDES FOR:

compensating the contractor for all additional labor, equipment and material costs incurred to remove the existing structure from Bent 48 to Bent YB4.

This project, the Temporary Bypass Structure (TBS), was awarded in March 2004 to construct a detour that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The TBS encompasses three main structures, the East Tie-In to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island, and the Viaduct structure between the two tie ins.

Two separate Department strategy memorandums issued on December 14, 2006 entitled 'Strategy for South-South Detour Contract Completion' and December 25, 2006 entitled 'Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order' were approved by Tony Anziano - Toll Bridge Program Manager, Richard Land - Chief Engineer, and the Toll Bridge Program Oversight Committee (TBPOC), which recommended the design of the ETI and WTI structures and enhancement of the Viaduct be assumed by the Department as opposed to the as-bid performance based contractor design and that a portion of the YBITS foundation work be performed under this contract by change order.

This change is necessary in order to compensate the contractor for all additional costs incurred as result of changed field conditions, delays, and escalation including:

- 1. All labor, equipment and material escalation costs.
- 2. All Silverado Contractors time-related overhead costs.
- 3. Loss of anticipated revenue resulting from changes in steel and concrete salvage market prices.
- 4. Furnishing, installing, relocating, storing and removing all temporary supports systems.

The aforementioned lump sum shall include compensation for all costs involved in working around, protecting, and repairing newly constructed columns, structures and facilities constructed under contract change orders 64, 73, 75 and 77.

The following associated work shall be compensated as provided under separate existing and/or pending contract change orders:

- 1. Flagging.
- 2. Traffic Control
- 3. Storm water pollution prevention compliance.
- 4. Engineering associated with temporary support design and bridge removal plan.
- 5. Furnishing and placing additional backfill as required at W5 footings.

If required by the Engineer, installation and removal of cable bracing system at the upper deck, and displacement monitoring of the temporary support system shall be paid for under a separate change order.

## **CONTRACT CHANGE ORDER MEMORANDUM**

EA: 0120R4 CCO: 65 - 1

DATE: 3/19/2009

Page 2 of 2

Compensation for this change shall be made as Extra Work at Agreed Lump Sum in the amount of \$12,727,660.00, and by deleting Bid Item 40: Bridge Removal, for a total increase of \$9,227,660.00, which can be financed through the Contingency Fund. This change constitutes full and equitable resolution for all issues, disputes and potential claims related to the demolition of the existing structure from Bent 48 to Bent YB4. Cost analyses and other cost related data are included in the associated file.

The total estimated cost of CCO 65, including all supplementals to date, is \$9,402,660.00.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may become the controlling operation in accordance with Section 8-1.07 "Liquidated Damages", of the Standard Specifications and Section 10-1.20 "Time Related Overhead (TRO)" of the Special Provisions.

Compensation for delays resulting from this work will be made in accordance with Section 8-1.09 "Right of Way Delays" of the Standard Specifications and Section 10-1.20 "Time Related Overhead" of the Special Provisions.

This change was concurred by Mike Whiteside - YBI Coordination Engineer, Alec Melkonians - Asst. Project Manager, Hong Wong - Project Engineer. Approval from the TBPOC pending.

Maintenance concurrence is not required, as this work does not affect any permanent roadway features.

CONCURRED BY:				ESTIMATE OF COST	
Construction Engineer:	Bill Casey, Resident Engineer	Date		THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	Mike Whiteside, Toll Bridge Design	Date	ITEMS FORCE ACCOUNT	(\$3,500,000.00) \$0.00	(\$3,500,000.00) \$175,000.00
Project Engineer:	Hong Wong, PE	Date	AGREED PRICE	\$12,727,660.00	\$12,727,660.00
Project Manager:	Alec Melkonians	Date	ADJUSTMENT	\$0.00	\$0.00
FHWA Rep.:		Date	TOTAL	\$9,227,660.00	\$9,402,660.00
Environmental:		Date		FEDERAL PARTICIPATIO	)N
Other (specify):	Patrick Treacy, HQ Asst.Const.Co		☐ PARTICIPATING ☐ NON-PARTICIPATIN	PARTICIPATING IN G (MAINTENANCE)	PART  NONE NONE
Other (specify):		Date	FEDERAL SEGREGATIO	N (if more than one Fun	nding Source or P.I.P. type)
District Prior Approval By	:	Date	CCO FUNDED PER C		CCO FUNDED AS FOLLOWS
HQ (Issue Approve) By:	Bob Molera, HQ CCO Engineer	Date	FEDERAL FUNDING S	SOURCE	PERCENT
Resident Engineer's Sign	nature:	Date	ie		
				a. 8 .5.	a

## CONTRACT CHANGE ORDER

Change Requested by:

Engineer

CCO 65

Suppl. No. ()

Contract No. 04 - 0120R4

Road SF-80-12.6/13.2

FED. AID LOC .: ACBRIM-080-1(097)N

To: CC MYERS INC

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

#### **Extra Work at Force Account:**

As authorized by the Engineer, provide advance planning for the bridge demolition work concerning Contract Bid Item No. 40 "Bridge Removal" necessary due to the presence of the Bent W3 through Bent W7 foundations and columns that have been added to the contract.

Estimated Cost of Extra Work at Force Account ......\$175,000.00

	Estimated Cost: Increase 🗹 Decrease 🗍	\$175,000.00
By reason of this order the time of compl	etion will be adjusted as follows: 0 days	
Submitted by		
Signature	Resident Engineer BILL CASEY	Date 3-5-08
Approval Recommended by		
Signature	Area Construction Manager DENNIS TURCHON	Date 3/7/08
Engineer Approval by		
Signature	Area Construction Manager  DENNIS TURCHON	Day 14/03
We the undersigned contractor, have given	careful consideration to the change proposed and agree, if this proposal is approve	ed, that we will provide all

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptançe b	by the state of th			
Signature	Maiil	(Print name and title)  ANIEL E. HMICK,	PRESIDENT	Date 4/06/08
· · · · · · · · · · · · · · · · · · ·		7		

RECEIVED

DATE: 3/3/2008

Page 1 of 2

## CONTRACT CHANGE ORDER MEMORANDUM

TO: MIKE FORNER / E	DENNIS TURCHON		FILE: E.A. 04 - 0120R4 0 7 6 5 0 JUN 20 8		
			CO-RTE-PM	SF-80-12.6/13.2	4400
FROM: BILL CASEY			FED. NO.	ACBRIM-080-1(097)N	
CCO#: 65 SUPPLEMENT#: 0 Category Code: CHPA			CONTINGENCY	BALANCE (incl. this chai	nge) <b>\$73,973,284.82</b>
COST: \$175,000.00 INCREASE ✓ DECREASE			HEADQUARTER	RS APPROVAL REQUIRE	ED? YES V NO
SUPPLEMENTAL FUNDS	PROVIDED:	\$0.00		ST IN ACCORDANCE W AL DOCUMENTS?	ITH VES NO
CCO DESCRIPTION:			PROJECT DESCRIPTION:		
Demo Existing Bridge Adv.	Planning		CONSTRUCT ROUTE 80 TEMP BYPASS STRUCTURE		
Original Contract Time: Time Adj. This Change: Previously Approved C Time Adjustments:				Total # of Unreconciled Deferred Time CCO(s): (including this change)	
<b>475</b> Day(s)	<b>0</b> Day	y(s) 1195 Da	y(s)	<b>252</b> %	7

#### THIS CHANGE ORDER PROVIDES FOR:

Advance planning pertaining to the demolition of the existing mainline bridge.

This project, the Temporary Bypass Structure (TBS), provides for the construction of a detour that will allow for the tie in of the new east span of the San Francisco Oakland Bay Bridge to Yerba Buena Island. The TBS encompasses three main structures, the East Tie-In (ETI) to the existing bridge, the West Tie-In (WTI) to Yerba Buena Island and the Viaduct structure between the two tie ins.

After traffic is placed onto the TBS detour, the contract calls for the removal of the abandoned section of bridge. This section is approximately 330 meters long and consist of a both double deck steel truss and concrete viaduct. Based on a December 25, 2006 Department memo, which was approved by Tony Anziano (Toll Bridge Program Manager), Richard Land (Chief Engineer) and subsequently by the Toll Bridge Program Oversight Committee (TBPOC), the advance construction of 10 foundations and columns from the future Yerba Buena Island Transition Structure (YBITS) project have been added to this contract with 3 additional columns in the process of being added. Many of these columns are being constructed directly under the existing bridge that is called for to be removed.

The advance construction of the YBITS foundations and columns will require a revised removal method for the abandoned structure than what was anticipated at the time of bid as the obstructions will require the bridge removal be performed on a more piecemeal basis. This change order provides for the advance planning of this revised bridge removal method in order to mitigate extensive delays to the project completion.

Compensation for this work shall be paid as extra work at force account at an estimated cost of \$175,000.00 which shall be financed from the contract's contingency funds. A cost analysis is on file.

No adjustment of contract time is warranted as the advance planning work will not affect the controlling operation.

This change was concurred by Alec Melkonians - Asst. Project Manager.

Maintenance concurrence is not required as the work will not affect any permanent roadway features.

EA: 0120R4 CCO: 65 - 0

DATE: 3/3/2008

Page 2 of 2

CONCURRED BY:		ESTIMATE OF COST		
Construction Engineer:	Date	THIS REQUEST TOTAL TO DATE		
Bridge Engineer:	Date	TEMS \$0.00 \$0.00		
		FORCE ACCOUNT \$175,000.00 \$175,000.00		
Project Engineer:	Date	AGREED PRICE \$0.00 \$0.00		
Project Manager: Alec Melkonians	Date 3/4/08	ADJUSTMENT \$0.00 \$0.00		
FHWA Rep.:	Date	TOTAL \$175,000.00 \$175,000.00		
Environmental:	Date	FEDERAL PARTICIPATION		
Other (specify):	Date	☐ PARTICIPATING ☐ PARTICIPATING IN PART ☐ NONE ☐ NON-PARTICIPATING (MAINTENANCE) ☐ NON-PARTICIPATING		
Other (specify):	Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)		
District Prior Approval By:	Date	✓ CCO FUNDED PER CONTRACT CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:	Date	FEDERAL FUNDING SOURCE PERCENT		
Resident Engineer's Signature:	Date			
	3-5-08			

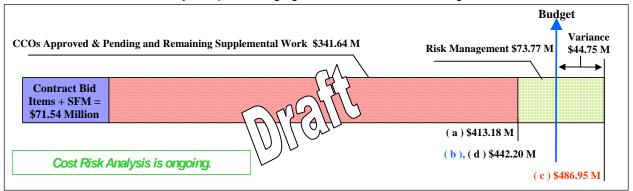


South-South Detour (Contract 04-0120R4)						
Contract Award:	March 10 <sup>th</sup> , 2004	Suspension Days:	302 Working Days			
Original Working Days:	475 Working Days	Contract Extensions:	1195 Working Days			
Original Contract Completion:	July 27th, 2005	Projected Contract Completion:	April 30, 2010			

#### Introduction

Two memos were developed to outline a strategy for a revised SSD project that enhanced SSD viaduct design, developed tie-in design (east and west) in-house, improved the retrofit of the YBI viaduct (replacing the top deck of the viaduct rather than retrofitting in place) and advanced and incorporated select YBITS foundation work. The two memos are "San Francisco-Oakland Bay Bridge Corridor Schedule Mitigation – Strategy for South-South Detour Contract Completion" issued December 14, 2006, and "Recommendation to Construct Select Yerba Buena Island Transition Structure Foundations by Contract Change Order" issued on December 25, 2006. This strategy will result in substantial increases in the cost of the SSD project.

As approved at the March 2008 TBPOC meeting the revised budget for the SSD Project is 442.2M. This figure was established using available information as of January 2008 noting that the plans and specifications for the WTI Phase 2 and ETI were not fully complete, ranging from the 65% to 100% stage.



#### Scope of Work for SSD

The revisions to the original scope of work currently associated with the South-South Detour Project have been assigned into the following categories with their associated estimated cost:

Category	Scope of Work	Current Budget (March 2008)	In Progress Status Update from March 08 Approved Budget		
		(March 2000)	Current	Delta	
(0)	Original Bid Items, Baseline CCOs (1 through 48), and State Furnished Materials	\$83.7	\$83.7	\$0	
(1)	SSD New Viaduct	\$31.9	\$35.6	\$3.7	
(2a)	West Tie-In Existing Viaduct Phase 1	\$39.6	\$40.1	\$0.5	
(2b)	West Tie-In Phase 2	\$15.0	\$21.4	\$6.4	
(3)	East Tie-In	\$72.5	\$106.1	\$33.6	
(4)	YBI Transition Structures Advance Foundations	\$105.8	\$104.4	(\$1.4)	
(5)	Administrative Issues and General CCOs	\$48.6	\$33.1	(\$15.5)	
Subtotal		\$397.1	\$424.4	\$27.3	
Contingend	ey	\$45.1	\$17.8		
Approved E	Budget	\$442.2			

Contract payments as of March 20, 2009: \$307.4M

As shown, the current status of CCOs required to modify the original scope of the SSD work as defined in Categories 1 through 5 is \$340.7M. The status of each category of work is discussed in the succeeding pages of this report.



Bid Items, Baseline CCOs, & State Furnished Material



The break down of Category (0) is as follows:

Original Contract Amount \$ 71.2 million
Baseline CCOs (1 through 48) \$ 12.1 million
State Furnished Materials \$ 0.4 million
Total \$ 83.7 million

## Baseline Contract Change Orders (1 through 48)

CCO#	Description	Executed Date	Cost	CCO#	Description	Executed Date	Cost
1	Flagging and Traffic Control	5/13/2004	\$100,000.00	24S1	Read Inclinometer/Adjust Equipment Costs	10/18/2005	\$29,782.99
1S1	Additional Funds for Flagging and Traffic Control	2/9/2007	\$200,000.00	24\$2	Temporary Suspension Partially Extended	5/2/2006	\$4,812,631.58
2	Bidder Compensation	5/8/2004	\$1,575,000.00	24\$3	Contract Days Extension/TRO Compensation	Voided	N/A
3	Partnering	9/7/2004	\$25,000.00	25	Bent 48, 49R, 52R Outside Boundary	3/24/2005	(\$19,000.00)
4	DRB	9/7/2004	\$100,000.00	26	Bent 48 Articulation	4/22/2005	\$0.00
5	Federal Trainee Program	11/12/2004	\$20,000.00	27	Bent 52L Footing Conflict	1/19/2006	\$94,386.51
5S1	Non-Journey Person Training	3/10/2005	\$50,000.00	28	Hydroseed Around W2 Columns	3/24/2005	\$20,000.00
6	Removal of DBE/SBE Monitoring	2/10/2005	\$0.00	29	Replacement of Surveillance Camera	3/24/2005	\$3,542.00
7	Sampling and Analysis Work	8/30/2004	\$30,000.00	30	Additional Elastic Response Analysis	5/31/2005	\$10,700.00
8	SWPPP Maintenance Sharing	8/30/2004	\$75,000.00	31	Soil Analysis Outside Plan Limits	6/27/2005	\$20,000.00
9	Additional Photo Survey/Public Relations	9/14/2004	\$50,000.00	32	SFPUC Permit Specification Change	5/17/2005	\$0.00
10	Temporary Shuttle Van Service	7/16/2004	\$650,000.00	33	Design Enhancements	Voided	N/A
10S1	Additional Funds for Temporary Shuttle Van Service	6/23/2005	\$100,000.00	34	Pole Structure Welding Specification Revision	9/30/2005	\$0.00
10S2	Additional Funds for Temporary Shuttle Van Service	1/12/2007	\$500,000.00	35	Revision of East Tie-In Design Criteria	Voided	N/A
11	Utility Potholing	9/14/2004	\$100,000.00	36*	Extend Limits of Viaduct Demolition	Voided	N/A
12	Just-In-Time Training (RSC Pavement)	2/10/2005	\$5,000.00	37	4 Hr Emergency Travel Way	Voided	N/A
13	PMIV Document Management System	11/3/2004	\$486,743.50	37S1	Emergency Travel Way Falsework	Voided	N/A
14	Temporary Suspension	5/19/2004	\$0.00	38	Revision of West Tie-In Design Criteria	8/4/2005	\$0.00
15	Archaeology Investigation	7/19/2004	\$30,000.00	39	Provide Shuttle Service to USCG	6/27/2005	\$10,000.00
15S1	Additional Funds for Archaeology Investigation	4/22/2005	\$15,000.00	40	Sewer Pipe Material Change	9/26/2005	\$1,561.95
16	Roadway Profile at WTI	Voided	N/A	41	Bent 49L Utility Relocation	Voided	N/A
17	Modify Drainage at G4 Entry Vault	10/24/2006	\$108,217.45	42	Bent 48R Pile Load Test	9/12/2005	\$20,000.00
18	Access Control Measures	9/8/2004	\$50,000.00	42S1	Bent 52R Pile Load Test	12/15/2005	\$5,000.00
19	EDR1 Alignment Modification	5/12/2005	\$0.00	43	Material On Hand Specification Change	9/16/2005	\$75,953.88
20	A490 Bolts	10/23/2006	\$0.00	43S1	Addition of YBITS Advance to Material On Hand	Voided	N/A
21	Removal /Disposal of Stairway	4/13/2005	\$14,060.00	44	Electrical Call Box Relocation		\$47,480
22	Clean Stairs and Walkways	5/24/2005	\$35,000.00	45	Additional SWPPP	2/21/2006	\$250,000.00
22S1	Additional Funds for Cleaning Stairs and Walkways	11/24/08	\$25,000.00	46	Southgate Road Reopening	3/8/2006	\$50,000.00
23	Shared Field Data System (ShareArchive)	Voided	N/A	47	Hazardous/Non-Hazardous Soil Removal	12/15/2005	\$100,000.00
24	East and West Tie-In Temporary Suspension	2/1/2005	\$2,181,467.40	48	Buried Man-Made Objects	12/15/2005	\$50,000.00
Total fo	r Baseline Contract Change O	rders					12,107,527.26

The scope of work for CCO No. 36 was completed and compensated for under the larger scope of CCO No. 76.



## **SSD New Viaduct**



## Progress of Work

Construction of foundations, columns, and bent caps is complete. Fabrication of the structural steel truss, performed by Dongkuk S&C in South Korea, is complete with all steel having arrived in the U.S.. All Viaduct steel has been erected into place. Concrete has been poured for both upper and lower decks in Spans 48, 49, and 50. Deck construction is ongoing in and Span 51.

Status of Contract Change Orders: SSD New Viaduct:

ССО	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
49	LS	Stringer and Floor Beam Design Study	N/A	N/A	Executed 5/2/2006	\$109,182	N/A
49S1	FA	Truss Design Modifications (Changes to Stringer and Floor Beam Connections)	I&A 12/08/06	N/A	Executed 8/17/2006	\$150,000	N/A
49S2	FA		I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
Subtotal	I (CCO #49	and Supplements)				\$359,182	
50	FA		N/A	N/A	Executed 5/8/2006	\$325,000	N/A
50S1	FA	Stand Alone Viaduct Design	I&A 9/21/06	N/A	Executed 10/16/2006	\$300,000	N/A
50S2	FA	Starte / World Vidadot 200.gr	I&A 12/08/06	N/A	Executed 12/18/2006	\$100,000	N/A
50S3	FA		I&A 2/09/07	N/A	Executed 2/13/07	\$175,000	N/A
Subtotal	I (CCO #50 a	and Supplements)				\$900,000	
54	LS	Deck Drainage	N/A	N/A	Executed 5/2/07	\$8,000	N/A
55	LS	Viaduct Fabricator Change (SGT Closeout)	I&A 7/08/07	Approved 6/27/07	Executed 8/7/07	\$5,665,330	N/A
55S1	LS	SGT Fabrication Closeout - Dongkuk Materials	I&A 1/24/08	Approved 3/5/08	Executed 3/17/08	\$980,600	\$70,600
59	LS	Water Blast Rebar Cages	N/A	N/A	Executed 2/22/07	\$5,000	N/A
59S1	LS	Additional funds, Water Blast Rebar Cages	N/A	N/A	Executed 11/24/08	\$5,000	\$5,000
60	LS	Construction of Bent Caps	I&A 6/13/07	Approved 6/27/07	Executed 6/18/07	\$7,435,950	N/A
67	FA	Viaduct/ETI Interface Modifications (Design Cost)	I&A 5/14/07	N/A	Executed 9/27/07	\$800,000	N/A
79	LS	Fabrication Cost for Viaduct Design Changes July '05 - October '06	I&A 7/19/07	N/A	Executed 8/7/07	\$803,400	N/A
79S1	LS	Fabrication Cost for Viaduct Design Changes - July 05-Oct 06	I&A 6/13/08	N/A	Executed 8/4/08	\$75,860	(\$174,140)
80	LS	Erection Costs for Viaduct Design Changes through October 2006	N/A	Approved 1/31/08	Executed 2/20/08	\$6,912,200	N/A
82	FA	AC Paving and Erosion Control for Deck Drainage		N/A	In progress	\$250,000	\$0
85	LS	Design of 300mm Waterline Relocation	N/A	N/A	Executed 3/17/08	\$12,480	\$1,994
87	LS	Viaduct Shipping Escalation Costs	I&A 7/24/07	N/A	Executed 10/2/07	\$534,570	N/A
87S1	LS	Viaduct Shipping Escalation Costs	I&A 1/14/08	N/A	Executed 1/30/08	\$200,000	N/A
88	LS	Viaduct Fabrication Delays	I&A 7/19/07	N/A	Executed 8/7/07	\$954,460	N/A
88S1	LS	Viaduct Fabrication Delays	I&A 8/22/07	N/A	Executed 9/27/07	\$776,630	N/A
98	FA/LS	Viaduct Steel Storage and Handling Cost	I&A 5/30/08	N/A	Executed 6/18/08	\$845,370	\$345,370
99	LS	Viaduct Erection Costs (Post Oct. 2006)	I&A 4/17/08	N/A	Executed 5/22/08	\$862,614	(\$139,716)



Current	Forecast f	or SSD New Viaduct				\$35,619,719	\$3,692,181
156	LS	Span 49 F/W Conflict w/ USCG Utilities	N/A	N/A	Executed 9/23/08	\$180,820	\$180,820
152	LS	Relocate USCG Road for steel erection FW Towers at Span 51	I&A 1/06/09	N/A	Executed 2/4/09	\$336,420	\$186,420
148	FA	USCG Road Canopy below Viaduct	I&A 8/27/08	N/A	Executed 9/23/08	\$500,000	\$500,000
138	LS	Waterline Relocation for Fire Hydrant (Conflicts with Span 49 Falsework)	N/A	N/A	Executed 9/23/08	\$278,200	\$278,200
136	FA/LS	Provide additional alternate entrance access to USCG Base	N/A	N/A	Executed 9/23/08	\$74,540	\$74,540
135	LS	Rebar Deck Escalation Costs	I&A 11/09/08	N/A	Executed 1/28/09	\$995,100	\$495,100
133	-	Lightweight Conc. Mix Design Spec Change	N/A	N/A	Executed 9/12/08	\$0	\$0
128		Waterline Relocation (NOPC 6)		N/A	In progress	\$200,000	\$200,000
115	FA	Third VIA Shipping for CCO #67 July 07 plans	I&A 5/06/08	N/A	Executed 5/22/08	\$850,000	\$450,000
111S1	LS	Additional costs USCG Parking Lot	N/A	N/A	Executed 6/30/08	\$8,940	\$8,940
111	FA/LS	USCG Parking Replacement and Protection	N/A	N/A	Executed 3/17/08	\$163,223	\$163,223
107	LS	Furnish and Drive Erection Tower Falsework Piles	I&A 8/07/08	N/A	Executed 10/02/08	\$855,190	\$355,190
106		CCO Voidedprevious scope of work was incorporated into CCO 105				-	-
105	FA/LS	Dongkuk Fabrication and Temp Bracing Fabrication Costs (July 2007 Plans)	I&A 4/2/08	Approved 4/3/08	Executed 4/17/08	\$2,140,640	\$690,640
100	FA	Viaduct Fabrication Costs (Post Oct. 2006)	I&A 1/22/08	N/A	Executed 1/28/08	\$650,000	N/A

### **Budget Status**

The Viaduct portion of the SSD was bid at \$26.74M. The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$9M. The January 2008 revised additional cost estimate is \$31.9M with a current projection of \$35.6M. CCOs executed to date are \$35.2M.

West Tie-In

Phase 1



## Progress of Work

Phase 1 work was substantially complete with the move in of the Structure on September 03, 2007. Miscellaneous electrical and drainage work remain. WB On-ramp was reopened on August 8, 2008.

Status of Contract Change Orders: West Tie-In Existing Viaduct (Phase 1)

ССО	/lethod o Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
58	FA	Bridge Removal Plan	N/A	N/A	Executed 11/21/06	\$60,000	N/A
58 S1	FA	Bridge Removal Plan	N/A	N/A	Executed 7/05/07	\$40,000	N/A
61	FA	Advance Engineering (Work Plans and Submittals), Site Prep (Ramp Closures, Access Road), Civil Work (Grading), Structure Work (Material Procurement)	I&A 1/09/07	N/A	Executed 2/27/07	\$400,000	N/A
61S1	LS/FA	Construction of Stage 1 Area and Substructure	I&A 5/16/07	Approved 6/27/07	Executed 5/18/07	\$9,995,644	N/A
66	FA	TMP - Video Equipment (WTI Phase 1)	N/A	N/A	Executed 7/20/07	\$175,000	N/A
68	FA	Temporary Electrical Work	N/A	N/A	Executed 7/20/07	\$140,000	N/A
68S1	FA	Temporary Electrical Work Stage 2, 3 &4	I&A 12/02/07	N/A	Executed 10/31/07	\$510,000	N/A



urrent S	tatus for W		\$40,063,064	\$466,080			
103	LS	Labor Day Weekend Closure Misc. Costs	N/A	N/A	Executed 2/20/08	\$173,140	(\$26,860)
102S1	LS	Northside Drainage Work	N/A	N/A	In Progress	\$52,240	<b>Φ12,240</b>
102	FA	North side Drainage Work	N/A	N/A	Executed 4/4/08	\$60,000	\$12,240
101S1	LS	WB Onramp Supplemental Work	I&A 1/06/09	N/A	Executed 2/4/09	\$149,560	φ460,700
101	LS	Reconstruct Slab, West Bound On-ramp	I&A 4/02/08	N/A	Executed 4/17/08	\$846,140	\$480,700
84	LS	Skid Track Foundations and Temporary Columns	I&A 7/27/07	Approved 7/27/07	Executed 7/31/07	\$3,980,000	N/A
76S1	LS	Labor Day Bridge Move-In (Changeable Message Signs, Temporary Signs, Traffic Control, Bridge Removal, Bridge Move-In, Paving and Roadway Repairs, CCM Support Costs, City Traffic Officers)	I&A 8/28/07	Approved 8/24/07	Executed 9/27/07	\$10,144,140	N/A
76	LS	Labor Day Bridge Demolition and Move-In	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$2,240,300	N/A
72	LS	Structure Work (Superstructure), and Temporary Shuttle Service	I&A 7/19/07	Approved 7/27/07	Executed 7/20/07	\$11,096,900	N/A

#### **Budget Status**

The projected additional costs in the December 14, 2006 Strategy Memorandum were estimated to be \$40M. The January 2008 revised additional cost estimate is \$39.6M with a current projection of \$40.1M. CCOs executed to date are \$40M.

West Tie-In Phase 2 2b

#### Progress of Work

Construction/Design coordination meetings with the Contractor are ongoing as needed. Foundation work and columns are complete. Superstructure for Frames 1 and 2 have been cast. Post tensioning and preparation for load transfer in progress.

Status of Contract Change Orders: West Tie-In (Phase 2)

ссо	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
62	LS	Construction of Phase 2 Foundations and Credits for Elimination of Bid Items 12 and 90	I&A 2/29/08	Approved 4/4/08	Executed 4/7/08	(\$4,649,850)	\$309,150
71	LS	WTI Phase 2 Pile at Bent 46L/Slab Bridge Removal	I&A 7/24/07	N/A	Executed 7/20/07	\$384,130	N/A
108	LS	Substructure	I&A 6/20/08	Approved 6/18/08	Executed 6/25/08	\$5,378,800	\$720,800
117	FA	Surface Drainage (Southside)	N/A	N/A	Executed 1/6/09	\$150,000	\$0
141	LS/FA	Superstructure Construction	I&A 11/13/08	Approved 11/18/08	Executed 11/25/08	\$13,200,000	\$3,855,000
14151		Superstructure Construction Completion Incentive (Release of Frame 1 Bent Cap FW)		TBD	In Progress	\$1,500,000	\$1,500,000
143		Civil Work (EB Onramp and Mainline)		TBD	In Progress	\$5,033,035	\$0
161	LS	T7-Line Detour	I&A 11/10/08	N/A	Executed 11/25/08	\$403,965	\$0
Current S	Status for W	\$21,400,080	\$6,384,950				

#### **Budget Status**

The Contractor's bid price for the West Tie-In was \$9.0M. Based on the Department's December 14, 2006 Strategy Memorandum, the costs associated with the Phase 2 West Tie-In work were estimated to be an additional \$13.0M. The January 2008 revised additional cost estimate is \$15.0M, with a current projection of \$21.4M. The January 2008 revision is based on complete foundation plans and 65% in progress substructure and superstructure plans. CCOs executed to date are \$14.9M.



#### East Tie-In



#### Progress of Work

Bent 52A and skid bent foundations design packages were delivered October 2007. ETI design plans for the skid bents and skid beams were delivered March 15, 2008 and truss plans were delivered April 7, 2008. Construction/Design Coordination meetings with the Contractor are ongoing.

Fabrication subcontractors are continuing to procure material and fabricate members. Fabrication of the skid bent and skid beams is taking place at Thompson Metal Fab, Inc. in Vancouver, WA and the fabrication of the truss is taking place at Stinger Welding Inc. in Coolidge, AZ. The first steel for the skid bents has been delivered to the site. With regard to the Superstructure, the North and South Trusses are complete and are in the process of being painted. The floor sections are in the process of fit-up.

The existing SFPUC sanitary sewer pump station has been relocated, the new pump station is up and running. Construction of the skid bent foundations is progressing on schedule. Lead abatement in span YB-4 of the existing truss is complete. Work on the bent cap at bent 52A is complete. Work on the crane runway trestle is complete. Erection of the Skid Bent towers, beams and truss falsework are ongoing.

Status of Contract Change Orders: East Tie-In

ссо	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget	
63	FA	Advance Engineering (Work Plans and Submittals)	I&A 8/22/07	N/A	Executed 9/27/07	\$800,000	N/A	
69	LS	Procurement of Pump/Control Panel for Pump Station Relocation	N/A	N/A	Executed 10/10/07	\$111,280	N/A	
69S1	LS	Construction for Pump and Control Panel for Relocated Pump Station	I&A 12/19/07	N/A	Executed 3/17/08	\$499,996	\$11,986	
69S2	LS	Sewer Pump Electrical Changes	I&A 2/25/09	N/A	In Progress	\$8,953	\$8,953	
90	LS	Bent 52A and Skid Bent Footings and Credits for Eliminated Bid Items 10 and 42	I&A 3/26/08	Approved 4/4/08	Executed 4/14/08	\$11,308,380	\$0	
92	FA	ETI AT&T Fiber Optic Relocation	N/A	N/A	Executed 12/17/07	\$175,000	N/A	
93	LS/FA	Lead Paint Mitigation Existing Truss (Span YB-4)	I&A 2/13/08	N/A	Executed 2/20/08	\$563,725	\$3,725	
97	FA	Bent 52A and Skid Bent Ftg's Material Procurement	I&A 11/06/07	N/A	Executed 11/19/07	\$850,000	N/A	
104	LS	Pier E-1 Access Towers	N/A	N/A	Executed 1/30/08	\$150,000	N/A	
113	LS	Relocate Waterline in Conflict with Northern Skid Bent Footings	N/A	N/A	Executed 3/17/08	\$167,990	\$167,990	
121	LS	Construct Stage 1 Soil Nail Wall, Upper East Tie-In area	N/A	N/A	Executed 3/17/08	\$142,670	\$0	
12151	LS	Construct Stage 2 Soil Nail Wall, Upper East Tie- In area		N/A	In Progress	\$518,130	ΨΟ	
127	FA	RTU - 8 Service Platform	N/A	N/A	Executed 9/03/08	\$75,000	(\$75,000)	
		Roll-In Roll-Out, Install Joint Seals, Demolition, Existing Truss Strengthening, Stage 2 Wall, TMP, and Civil Work		TBD	In Progress	\$17,963,611	\$0	
129	LS	Skid Bent and Truss Steel Erection	I&A 11/05/08	Approved 11/10/08	Executed 11/25/08	\$14,712,500		
129S1	LS	Skid Bent and Truss Steel Erection Acceleration	I&A 3/09/09	Approved 3/5/09	In Progress	\$535,000	\$7,205,651	
129S2	LS	Skid Bent and Truss Steel Erection Incentive		TBD	In Progress	\$1,177,000		
137	LS	Pump station Water Tank Demo	N/A	N/A	Executed 6/26/08	\$114,490	\$114,490	
112	FA	Material Procure Skidbent (1532 Tower Legs)	I&A 1/10/08	Approved 2/4/08	Executed 2/19/08	\$2,000,000		
112S1	FA	Material Procure ETI Superstructure	I&A 3/03/08	Approved 3/5/08	Executed 3/17/08	\$8,500,000		



Current Status for East Tie-In \$106,139,017 \$33,641,177								
172	LS	Lead Paint Abatement and Access at YB-3	I&A 12/18/08	N/A	Executed 2/4/09	\$210,450	\$210,450	
169	LS	Skid Beam Jobsite Handling and Local Transportation Costs	I&A 1/02/09	Approved 12/23/08	Executed 2/25/09	\$1,095,020	\$1,095,020	
164	LS	ETI Steel Erection Crane Runway Trestle	I&A 11/20/08	ATP 11/14/08 Approved 12/23/08	Executed 12/6/09	\$2,700,000	\$2,700,000	
154S1	LS	Pile Anomaly Deduction at A6W & B52A	N/A	Approved 11/13/08	Executed 11/25/08	(\$2,183)	(\$2,183)	
154	LS	East Pile Deduct at BW6, East Pile	N/A	N/A	Executed 9/04/08	(\$400)	(\$400)	
149	FA	Bearing Fabrication	I&A 11/03/08	Approved 11/10/08	Executed 11/25/08	\$1,600,000	\$1,151,118	
144S1	FA	Expansion Joint Fabrication	I&A 2/03/08	Approved 2/5/09	In Progress	\$2,900,000	ψ039,912	
144	FA	Expansion Joint Mock-up	I&A 8/26/08	N/A	Executed 9/23/08	\$850,000	\$859,972	
166S1		Skid Bent & Beam Fabrication Incentive		Approved 12/23/08	In Progress	\$900,000		
166	LS	Skid Bent & Beam Fabrication Acceleration	I&A 12/22/08	Verbal Approval 11/06/08 Approved 12/23/08	Executed 1/28/09	\$2,028,950	\$20,189,405	
140	LS	Truss Steel Fabrication	I&A 9/04/08	Approved 9/04/08	Executed 9/23/08	\$10,920,525	400 100 100	
116S1	FA/LS	Skidbeam Design Modifications and Shipping Costs	I&A 12/19/08	Approved 12/23/08	Executed 2/3/09	\$1,896,750		
116	FA/LS	Fabricate Superstructure & Skidbent	I&A 6/04/08	Approved 6/16/08	Executed 8/8/08	\$14,166,180		
112S3	FA	Material Procure - Additional Funds	I&A 10/31/08	Approved 11/13/08	Executed 11/25/08	\$3,000,000		
112S2	FA	Material Procure ETI Temporary Bypass Structure	I&A 6/04/08	Approved 6/16/08	Executed 6/25/08	\$3,500,000		

#### **Budget Status**

The Contractor's bid price to construct the Contractor's design for the East Tie-In was \$6.0M with an additional \$1.46M to demolish the remaining portion of the ETI YB-4 span. The Department's December 14, 2006 Strategy Memorandum estimated an additional cost of \$34.0M to construct the Department's ETI roll out/roll in design concept. At the time, this estimate was based on minimal design information available. The January 2008 revised additional cost estimate is \$72.5M, with the current projection at \$106.1M. This revision is based on complete Bent 52A and skid bent foundation design plans and 65% skid bent, skid beam, and truss design plans. Executed CCOs to date are \$82.7M.

The material procurement and fabrication cost increases (CCOs 112, 116, 140, & 166) are attributed to an increase in steel weight from the 65% to 100% designed plans, along with a market fluctuation in steel price, as well as additional costs to expedite the Skid Bent/Beam and Steel Truss fabrication work.

## Yerba Buena Island Transition Structures Advance Foundations



#### Progress of Work

The YBITS foundation and column locations being advanced are W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, W7R/

W3 3L – substantially completed

3R – footing has been poured, column (2nd lift of 2) in progress

W4 4L – substantially completed



4R - column (2nd lift of 3) complete

W5 5L - 75 of 140 piles driven

5R – work not started

W6 6L – substantially completed

6R North - column (2nd lift of 3) complete

6R South - all piles driven

W7 construction of the temporary soil nail wall and soldier pile shoring complete

7L North – excavation complete

7L South – all piles driven, footing construction in progress

7R – excavation complete

Ramp – all piles driven, footing construction in progress

EB On-ramp abutment – temporary shoring piles and permanent CIDH piles have been installed

## Status of Contract Change Orders: YBI Transition Structures Advance Foundations

CCO	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
64	FA	YBITS W3L Site Prep and Grading and Construct Access Road	N/A	N/A	Executed 1/8/07	\$150,000	N/A
64S1	LS/FA	YBITS W3L Foundation and Column to Splice Zone, Integrated Shop Drawings for W3L, Concrete Washouts, 50% of Flagging, and Traffic Controls	I&A 3/13/07	Approved 2/15/07	Executed 4/4/07	\$5,835,000	N/A
65	FA	Demo Exist Bridge Adv. Planning	N/A	Approved 4/14/08	Executed 4/18/08	\$175,000	\$0
65S1		Demolish Exist Bridge (Bent 48 to YB-4)		TBD	In Progress	\$9,227,660	\$1,602,660
70	FA	Integrated Shop Drawings for Remaining YBITS Advance Locations (W3R, W4L/R, W5L/R, W6L/R, W7L/R, and W7 Ramp)	I&A 4/04/07	N/A	Executed 5/1/07	\$500,000	N/A
70S1	FA	YBITS Advance – ISD 3R, 4R/L, 5R/L, 6R/L, 7R/L & ramp	I&A 1/17/08	N/A	Executed 1/30/08	\$450,000	N/A
73	LS	YBITS W3R, W4R, W5R/L, W6R/L, and W7 Ramp Foundations and Columns	I&A 10/24/07	Approved 10/30/07	Executed 11/19/07	\$62,958,990	N/A
73S1		Duct Bank Revisions		N/A	In Progress	\$200,000	\$200,000
75	LS	YBITS W7R/L Foundations and Columns	I&A 4/2/08	Approved 4/3/08	Executed 4/14/08	\$13,125,000	(\$3,682,884)
<b>75S1</b>		Bent W7 Structure Backfill		TBD	In Progress	\$1,750,000	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
77	LS	YBITS W4L Foundations and Columns	I&A 6/13/07	Approved 7/27/07	Executed 7/20/07	\$7,125,000	N/A
78	FA	Relocation of Sewer Force Main	N/A	N/A	Executed 7/17/07	\$125,057	N/A
94	LS	YBITS Temp. EB Onramp Abutment Piles and Shoring		TBD	In Progress	\$400,000	(\$1,819,850)
118	FA	Vibration & Elev. Monitoring at W5L	N/A	N/A	Executed 2/20/08	\$50,000	\$50,000
118S1	FA/LS/ID	Nimitz House vibration monitoring	N/A	N/A	Executed 8/05/08	\$50,050	\$50,050
120	LS/Credit	CIDH Pile Mitigation Deduct	N/A	N/A	Executed 3/17/08	(\$400)	(\$400)
124	FA/LS	Seismic Monitoring & Column Grounding		N/A	Executed 11/25/08	\$353,975	\$353,975
126	FA	YBITS Excavation / Hazmat Disposal	I&A 4/7/08	Approved 4/3/08	Executed 4/17/08	\$500,000	\$400,000
147	LS	Add Cost W4R Foundation Construction	N/A	N/A	Executed 7/21/08	\$25,024	\$25,024
155	FA	Excess Soil Offhaul	I&A 8/13/08	N/A	Executed 9/03/08	\$500,000	\$500,000
159	LS	Redesign Bent W7 Soil Nail Wall	I&A 11/10/08	N/A	In Progress	\$916,280	\$916,280
Current S	Status for YE	BI Transition Structures Advance Foundations				\$104,416,636	(\$1,405,145)



#### **Budget Status**

The Department's December 25, 2006 Strategy Memorandum estimated the cost to construct Bents W3R/L, W4R/L, W5R/L, W6R/L, W7R/L, and W7 Ramp to be \$107M. In addition, the temporary E.B. onramp abutment was added at a later date with no estimate revision. The Departments December 14, 2006 Strategy Memorandum estimated the additional demolition costs for the existing bridge (Bent 48 through YB-4) to be \$3.5M. Removal of the existing bridge is included in the current contract; however, the Department anticipates additional costs resulting from impacts of the YBITS Advance work and associated costs due to escalation. The combined estimate for both was \$110.5M. The January 2008 revised additional cost estimate is \$105.8M with a current projection of \$102.8M. Total CCOs executed to date are \$91.9M.

## Administrative Issues General CCOs



#### Progress of Work

Administrative issues that remain on the SSD contract are related to setting project milestones and determining time related overhead resulting from the contract time extensions, escalation costs, the increased scope of work, and other necessary changes to the contract. Additionally, costs for implementing COZEEP for the East and West Tie-Ins need to be accounted for.

The following list of target milestones was previously provided to the Contractor to incorporate into the project schedule. This information will be revised as more detailed schedule information is developed.

	Date	Status	Notes
W3L (foundation and column up to splice zone)	March 15th, 2007	Complete	Finished 3/15/07
West Tie-In Phase 1 Viaduct Demo/Roll-In Complete	September 4th, 2007	Complete	Finished 9/04/07
Access to W3R Available to CCM	January 2nd, 2008		Coordinating access with SAS
Upper East Tie-In Area Available to CCM (Revised October 2008)	December 2009		Coordinating access with SAS
East Tie-In Roll-Out/Roll-In Complete (Revised October 2008)	September 7th, 2009		
Project Completion (Revised October 2008)	April 30th, 2010		

The Department has extended TRO compensation at the original contract rate through September 1, 2009. The Contractor has completed a TRO audit. The Department is reviewing this information so that an appropriate TRO adjustment can be negotiated.

The Department continues to pursue a resolution to the remaining NOPC issues. Of the 18 NOPC issues, only three remain outstanding. Of the three it is anticipated that Viaduct CCO #128 will resolve NOPC #6, resolution of the existing structure demolition costs will resolve NOPC #15, and resolution of the TRO costs will resolve NOPC #18.

## Status of Contract Change Orders: Administrative Issues

ССО	Method of Payment	Description	HQ Status	TBPOC Status	CCO Status	Current Estimate/ Actual Cost	Change from March 08 Approved Budget
1 S2	FA	Flagging & Traffic Control	N/A	N/A	Executed 12/5/07	\$200,000	N/A
1 <b>S</b> 3	FA	Flagging & Traffic Control	N/A	N/A	Executed 7/2/08	\$300,000	\$300,000
13S1	FA	PMIV Additional Funds (Resolved NOPC 7)	I&A 3/10/08	N/A	Executed 3/17/08	\$300,000	\$300,000
45 S1	LS	Additional SWPPP	I&A 12/14/07	N/A	Executed 1/31/08	\$350,000	N/A
51	LS	NOPC 12 & 13 Resolution	N/A	N/A	Executed 8/17/06	\$25,234	N/A
52	0	Elimination of Contractor's Design of Tie-Ins	I&A 1/19/07	N/A	Executed 3/2/07	\$0	N/A
53	FA	Handling and Storage of Material	I&A 11/06/06	N/A	Executed 12/8/06	\$240,000	N/A
56	LS	Contractor's Design additional cost Resolved NOPCs 2,3,4,8,9,10,11,14, and 16	I&A 2/20/08	Approved 3/5/08	Executed 3/17/08	\$6,837,310	(\$162,690)



Current S	Status for A	Administrative and General CCOs				\$33,123,182	(\$15,420,109)
		Non CCO ChargesCOZEEP, lead survey, respirator training			In Progress	\$1,323,000	\$0
176	FA	Construction Staking	N/A	N/A	In Progress	\$100,000	\$100,000
157		USCG Access Mitigation Stairway Design to Quarters Above		N/A	Executed 1/28/09	\$150,000	\$150,000
151		Public Safety Spec Change (Suspended Load)			Executed 9/23/08	\$0	\$0
146S1	FA	Add Funds Macalla Road Tree Trimming	N/A	N/A	Executed 11/25/08	\$50,000	\$100,000
146	FA	Macalla Road Tree Trimming	N/A	N/A	Executed 7/21/08	\$50,000	<b>#</b> 400.000
142	FA	Macalla Road Sinkhole Repair		N/A	Executed 7/18/08	\$150,000	\$150,000
132	LS	Storm Damage Slope Repair (Resolved NOPC 17)		N/A	Executed 5/23/08	\$23,870	\$23,870
131	FA	Delete Permanent Erosion Control Items		N/A	In Progress	(\$74,502)	(\$74,502)
130	LS	Project Retention	I&A 4/07/08	N/A	Executed 4/14/08	\$136,510	\$136,510
125S1	FA	Additional Funds, Project Access Paving	I&A 6/12//08	N/A	Executed 6/25/08	\$35,000	\$35,000
125	FA	Project Access Paving		N/A	Executed 4/04/08	\$150,000	\$150,000
123	FA	Treasure Island Yard Lot Rental	I&A 4/16/08	N/A	Executed 4/17/08	\$600,000	\$600,000
119	FA/LS/ID/ UP	Project Wide SWPPP	I&A 4/07/08	N/A	Executed 4/17/08	\$638,939	\$638,939
110	FA	Geotech. Exploration Pads and Support	N/A	N/A	Executed 2/20/08	\$150,000	\$50,000
109	FA	MEP Coordination	N/A	N/A	Executed 1/30/08	\$100,000	\$0
96S1	FA	Add Funds Shotcrete Slope at Bent 48	N/A	N/A	Executed 7/2/08	\$40,000	\$40,000
96	FA	SWPPP Steep Slope Stabilization Measures	N/A	N/A	Executed 1/4/08	\$190,000	\$0
91 S2	LS	Global TRO adjustment and Base Contract TRO extension to December 31, 2009		TBD	In Progress	\$10,500,000	(\$18,100,000)
91 S1	LS	Base Contract TRO Extension to September 1, 2009	I&A 10/25/07	Approved 10/30/07	Executed 11/16/07	\$8,463,159	\$0
91	LS	Contract Days Extension/TRO Compensation to November 08	RPP 8/28/07	TBD	Executed 10/31/07	\$1,818,948	N/A
86	LS	Additional Suspension Costs	N/A	N/A	Executed 5/19/08	\$42,764	(\$57,236)
66S1	FA	Video/Photo Documentation Services Supplemental Funds	N/A	N/A	Executed 4/14/08	\$200,000	\$200,000
57S1	LS	Remove and Clear Building 254	N/A	N/A	Executed 6/4/07	\$10,572	N/A
57	LS	Demolition of Building 206	N/A	N/A	Executed 10/18/06	\$22,378	N/A

## **Budget Status**

As of January 2008 the revised additional cost estimate for Time Related Overhead, escalation issues, and job wide changes is \$48.6M with the largest estimated cost being attributed to a global TRO adjustment. As Contract Change Orders for these items are negotiated, this estimate will be updated. Costs related to settlement of NOPC issues not captured here will be paid out of the contract contingency.

Additionally, the original contract allotment provided \$1.3M for COZEEP. Subsequently, there were \$23,000 in other charges for a lead survey and respirator training both related to the WTI Phase 1 demolition work, providing for total non-CCO related charges of \$1.323M to the contract. These costs are shown here to capture costs to the project. It is also important to note that with two full bridge closures planned additional COZEEP funds may be required.

Total CCOs executed to date are \$21.3M.



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Bart Ney, Public Information Officer, Caltrans

RE: Agenda No. - 4b3

San Francisco-Oakland Bay Bridge Updates

Item- Yerba Buena Island (YBI) Detour

East Tie-In 2009 Outreach Action Plan

## **Recommendation:**

**APPROVAL** 

**Cost:** 

N/A

## **Schedule Impacts:**

N/A

## **Discussion:**

The Outreach Action Plan outlines the proposed elements to educate stakeholders and the public about the 2009 Labor Day closure of the Bay Bridge. A full bridge closure is necessary to connect the Temporary Detour on Yerba Buena Island to the East Span. The outreach effort will build upon the successes and lessons learned from the previous bridge closures in 2006 and 2007, for the West Approach and the Yerba Buena Island Viaduct Replacement, respectively. Outreach will include expanding coordination with East Bay cities and counties, conducting advance planning with event venues, increasing distribution of information to statewide audiences, targeting Labor Day weekend travelers into and out of the Bay Area, and introducing social media channels to reach a growing audience of savvy Web and mobile technology users.

#### **Attachment(s):**

Bay Bridge Detour Tie-In, Stakeholder and Media Outreach Action Plan, Labor Day Weekend, September 2009



# BAY BRIDGE DETOUR TIE-IN STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

Labor Day Weekend, September 2009

## **OVERVIEW**

This report outlines the proposed outreach elements that will be implemented to inform stakeholders and the public about upcoming work on the Bay Bridge Detour Tie-In, as part of the Bay Bridge Seismic Safety Projects. The outreach effort for this operation will build upon the successes and lessons learned from the previous operations involving a full lower deck closure on the West Approach and the full Bridge closure for the Yerba Buena Island (YBI) Viaduct Replacement. Leveraging these past successes, the Bay Bridge Public Information Team will expand coordination with East Bay cities and counties, conduct advance planning with event venues, distribute information to statewide audiences, and target Labor Day weekend travelers into and out of the Bay Area.



Digital rendering of Tie-In

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

# SECTION ONE CRITICAL TALKING POINTS Closure Overview

On Labor Day weekend 2009, the San Francisco-Oakland Bay Bridge will be closed in both eastbound and westbound directions to facilitate critical seismic retrofit work.

Although the closure period is similar to previous work performed on the YBI Viaduct in 2007, this operation is different. It will involve the construction of skid bents and the erection of trusses prior to closing the existing bridge to traffic.

Once the existing bridge is closed to all motorist traffic, a 300-foot section of viaduct will be cut on both ends, lifted and moved out. The new Tie-In will then be moved in, lowered in place, and the expansion joints will be installed. Following that the new detour structure will be ready to be opened for traffic. This detour will allow construction crews to demolish the old Yerba Buena Island Approach and place the new bridge on the original footprint.

Caltrans has estimated that this work can be completed during a 3-4 day closure over the Labor Day weekend. Since the nature of this work does not allow for a contingency re-opening of the bridge, motorists will be advised to plan to use alternate routes and transportation if the Bay Bridge is not available due to unforeseen circumstances.

The Bay Bridge project team expects to conclude this construction operation on time. Once the operation has begun the bridge can not be re-opened to traffic until the work is complete. Transportation alternatives will be in place if unanticipated delays occur cause the bridge to remain closed beyond Tuesday morning.

## **Access & Transportation Alternatives**

During the closure, access from San Francisco to YBI and Treasure Island will be maintained. A lane will be dedicated in both the eastbound and westbound directions on the West Span of the Bay Bridge, which connects San Francisco to YBI.

- MUNI Service to Treasure Island (Line 108), including overnight service, will not be affected.
- A Public Information Office has been established on Treasure Island to serve as the primary point of contact for YBI and TI residents, businesses, and agencies.
- Coordination will be conducted on an ongoing basis with BART, AC Transit, MUNI, Golden Gate Transit, Samtrans, Vallejo Ferry, Alameda/Oakland Ferry, Caltrain, Greyhound and Amtrak to determine and plan any necessary schedule or route changes, and to include transit agencies in the operational planning for the bridge closure.
- BART will operate around the clock in selected stations.
- Ferry service on selected routes will be augmented.
- Coordination is occurring with transit providers to plan alternative routes for the closure.
- The MTC 511 system will serve as the primary resource for trip planning and up-to-date traffic information. Revised transit schedules will be available through 511.
- Daily communication will be maintained with other bridges (Golden Gate, San Mateo-Hayward, Dumbarton, Richmond-San Rafael) during the closures.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

#### **Outreach & Public Communication**

A substantial public outreach campaign is planned to inform motorists, residents and businesses about the Labor Day weekend Bay Bridge closure. This outreach effort will build upon the successes of the previous operations on the West Approach and YBI Viaduct which required full closures of the Bay Bridge.

The Bay Bridge PIO team will leverage these past successes, expand coordination with East Bay cities and counties, conduct advance planning with event venues, distribute information to statewide audiences, and target Labor Day weekend travelers into and out of the Bay Area.

Bay Area elected officials and media will receive early notice of the announcement regarding the 2009 Labor Day weekend closures. Immediately thereafter, the Public Information Team will begin a massive outreach effort targeting motorists, transit riders, and holiday travelers into and out of the Bay Area, as well as affected residents and industries.

Media will be updated regularly with media alerts, press releases, and construction information. During the weekend closure, construction site access and live PIO updates will also be provided.

BayBridgeInfo.org will be the nexus for construction updates and information, and 511 will be referenced as the official source for trip planning and traffic conditions.

Changeable message signs will be used to inform motorists about the upcoming closure in the Bay Area region, and where appropriate throughout Northern and Southern California.

A multilingual telephone hotline will be maintained throughout the closure.

## SECTION TWO ELECTED OFFICIALS OUTREACH

Elected officials will be informed directly on matters concerning the upcoming Bay Bridge closure.

## 2.1 Outreach Meetings

The Bay Bridge Public Info Team will provide multimedia presentations to project stakeholders on the upcoming work. Elected officials from the Bay Area will be invited to presentations given by the Bay Bridge Public Information Officer, Bart Ney, and East Span construction staff up to 5 months in advance of the closures. Invitations will be extended to the offices of Senators Boxer and Feinstein, all members of the Bay Area Congressional delegation, all Bay Area State Senators, all Assembly members from the Bay Area, as well as supervisors in all nine Bay Area counties, and mayors in key Bay Area cities. Contact will also be made with the affected transportation authorities, mayor's offices, and the Metropolitan Transportation Commission/Bay Area Toll Authority Commission. Graphics and informational fact sheets will be distributed.

#### 2.2 E-Alert

Electronic alerts will be sent to elected officials and staff contacts, providing information on the upcoming demolition and a link to a fact sheet which can be viewed electronically, shared, or printed in hardcopy. The first notification will serve as advance notice, and a second E-Alert will serve as a reminder a few days prior to the beginning of the operation.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

## SECTION THREE MEDIA OUTREACH

The Bay Bridge Public Information Team will inform the media prior to, during and after all major elements of the work.

## 3.1 Media Outreach Sessions

Media in the San Francisco Bay Area and in surrounding media markets will be invited to an outreach session. Separate media outreach sessions will be held in Sacramento or Southern California upon further direction from the TBPOC. Graphics, video and informational fact sheets will be distributed. These sessions are intended to raise media awareness, inform media of upcoming work, provide current contact information, foster collaborative working relationships and solicit feedback on enhancing our communication.

#### 3.2 Press Releases

A general press release will be distributed prior to the weekend closure. A detailed press release will be issued at the completion of the operation to keep media updated on the completion and re-opening of the Bay Bridge.

## 3.3 Public Information Officer Live Update

The Bay Bridge Public Information Officer (PIO) will be on site throughout the weekend operation. A general media hold will be made available throughout the weekend that provides views and access to the operation. Live updates to the media will be facilitated at the media hold. Talking points will be developed ahead of time and construction staff will provide real-time construction updates to the PIO for sharing with media.

## SECTION FOUR PUBLIC OUTREACH

A broad outreach campaign will inform as many potential weekend users of the Bay Bridge as possible. The targeted user groups will include Bay Area motorists, regional commuters, goods movement industries, out-of-town holiday travelers, the general public and immediate neighborhood residents. Notices will be provided months in advance.

#### 4.1 Public Service Announcements

Paid public service announcements will run in television, print, radio, online and in movie theaters to share information with the general public 3-4 weeks in advance of the beginning of work. Markets throughout the state will be targeted. Detailed graphics will be included in the messaging to help show the public the work that will be performed. Messaging will focus on keeping traffic away from the Bay Bridge approaches and encourage motorists to seek alternative transit and driving options.

## 4.2 Web site

All outreach materials will direct stakeholders to the BayBridgeInfo.org Web site for daily information and updates about the work, and associated closures. This includes graphical and text information on the work and the schedule; information on transit alternatives available, including links to each transit operator and to 511; links to radio and television announcements, and other informational materials. The Web site includes a comment form for users to send questions or feedback 24-hours a day as well as contact information for the Public Information Office and telephone hotline.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

## 4.3 External Website Information

Outreach efforts for the 2009 closure will focus heavily on increasing avenues of electronic communication. Key Web sites will be targeted in the industries of travel, sports and events venues, informational sites and community boards. Methods of communication include links and general information of closure dates and alternative forms of transportation.

<u>Travel sites</u>: Links on partner Web sites in the travel industry: AAA, all major airlines flying into the SFO and Oakland Airports, major booking sites (i.e. - Expedia, Orbitz, TravelZoo, etc.) and a link on the California Welcome Center Web site.

<u>Sports Team sites</u>: Information and a BayBridgeInfo.org link on local sports teams' Web sites includes: the San Francisco Giants, the San Francisco 49ers, the Oakland As, the Oakland Raiders, the Golden State Warriors and the San Jose Sharks.

<u>Sports/Event/Venue sites</u>: Information and the Project's Web site link on sites where the public purchases tickets to sports, concerts and theater events, these would include Ticketmaster, Livenation, and StubHub.

<u>Community Message Boards</u>: Posting information and the Project's Web site link on Craigslist.org, a heavily-trafficked local site in the Bay Area and other cities, and sites that list local events such as OnlyinSF.com and SFGuide.com.

<u>Wikipedia.org:</u> This site will be monitored for accuracy of posted information and will include closure information.

<u>GPS/Mapping sites</u>: Research will explore incorporating closure information and a Project Web site link on sites that provide traffic mapping and directions, such as Google maps, Yahoo maps and Mapquest. Coordination is possible with sites that link travelers' GPS systems, such as: OnStar, TomTom and Garmin.

#### 4.4 Public Venues and Events

The Public Information Team will coordinate with city street closure permit offices to distribute information at street fairs and events, such as the San Francisco North Beach Festival, Union Street Fair and the Oakland Art and Soul Festival.

## 4.5 Targeted Information Distribution

The Public Information Team will develop informational materials, including a fact sheet, for distribution electronically, via the postal service and at public areas located near the upcoming work. The fact sheet will include: Dates and times of work for the deck closures; Rationale for conducting this operation over Labor Day weekend; Transit and driving alternatives and information on the Bay Bridge Seismic Safety Projects.

#### Distribution

Where possible, coordination with the following entities will occur to provide electronic fact sheets for distribution to their constituents/clients/franchisees/mailing lists:

- Local/corridor businesses
- Neighborhood newsletters and other publications
- Treasure Island Development Authority and Mayor's Office staff
- Residential neighbors, including all Treasure Island/YBI residents
- Taxis and shuttle services, airports, hotels, car rental agencies, visitors' bureaus, the State Tourism Office, Chambers of Commerce and automobile associations
- Hospitals, major employers, funeral homes, farmers' markets associations, carpool centers, parking garages, malls
- Major regional and local entertainment and sports venues for the SF 49ers, Oakland Athletics, SF Giants, Oakland Raiders, university sports venues regarding home games over the Labor Day weekend.
- Cities from San Luis Obispo to Sacramento in the target market areas (Bay Area, Central Valley, Southern California, and Sacramento)

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

- Ferry operators, bus transit and rail operators, transit centers, Bay Area Rapid Transit (BART), the Water Transit Authority, and the San Francisco Metropolitan Transportation Agency
- San Francisco Municipal Railway (MUNI)
- State and local offices of the California tourism agencies and convention bureaus
- Approximately 5,000 organizations and private citizens on the Bay Bridge Public Information Office contacts list
- Festival associations and city permit offices
- Area attractions (zoos, museums, etc)
- Labor and credit unions (CTA, CALPERS, etc)
- Area school districts
- Car rental agencies
- The Department of Motor Vehicles
- Weigh stations for commercial trucks traveling throughout the Bay Area
- Associations for seniors such as AARP, Knights of Columbus, the VFW, etc.

## 4.6 Social Media

Social media on the Web has become a fundamental source for many commuters to interact and receive their news and information. The 'viral' nature of sharing information among social networks provides a new medium for this outreach campaign. It also provides the potential for exponential growth in the exposure and influence of the message. Examples of social media include Twitter, Facebook, and Flickr.

## 4.7 Bay Bridge Newsletter

The Bay Bridge PIO will produce a newsletter prior to the closure for both electronic and hard copy distribution. Recipients of this will come largely from a large database of contacts consisting of elected officials, key stakeholders, Bay Area businesses, project staff and community partners and residents.

## 4.8 Banners

Banners will be posted at multiple locations to guide the public on where to go for more information on the upcoming work and motorist impacts. The banners will be posted in advance and will point motorists and the general public to the BayBridgeInfo.org Web site, and 511.

## 4.9 Local Notification

Presentations and notices will be given to Treasure Island residents and any other residential or commercial locations that might be specifically affected by access restrictions, noise, dust, and vibration. Additionally, the 24-hour telephone hotline serves to provide nightly construction updates and receives questions and comments.

#### 4.10 Telephone Hotline

Caltrans provides a telephone hotline at the Public Information Office for motorists to receive daily updates on construction-related lane and ramp closures and other construction information, as well as for local affected residents and businesses to have direct contact with PIO staff. The hotline will be staffed for extended hours during the weeks leading up to and throughout Labor Day weekend.

#### 4.11 Changeable and Electronic Message Signs (CMS)

Caltrans will engage a statewide network of electronic and changeable message signs two weeks prior to the closures to alert motorists. Signs will be especially intensive in the Bay Area; Caltrans will work closely with Districts throughout the state to ensure that the message will be highly visible along major thoroughfares.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

## 4.12 Highway Advisory Radio (HAR)

The Bay Bridge Public Information Team will script the message and provide it to the Caltrans operations unit for posting on the HAR frequencies. Caltrans promotes the HAR on the banners posted within range of the HAR frequency.

## 4.13 E-Alert

Similar to the E-Alert sent to elected officials, an electronic alert will be sent to the general public. Thousands of project contacts will receive the E-Alert well in advance of the closures, providing information on the upcoming demolition and linking to a Fact Sheet which could be viewed electronically, shared, or printed in hardcopy. An additional (reminder) E-Alert will be sent a few days before the closure.

## 4.14 Out-of-town Traveler Notification

Additional efforts will target out-of-town travelers visiting the Bay Area during the Labor Day weekend, who might be impacted by the Bay Bridge closure. Many elements of the outreach plan will be implemented earlier than in past efforts, and extended to additional metropolitan regions in California. Visitor bureaus, recreational venues, and other traveler services will be included in all possible aspects of the outreach plan. Information will be distributed to hundreds of California cities, the Weather Channel and on the California Department of Tourism Web site. Information kiosks at major airports in the Bay Area throughout the four-day operation will provide information as well.

## 4.15 <u>Transit Agency Coordination</u>

Close coordination with transit agencies will inform transit riders of the upcoming closure. This effort will include BART, AC Transit, MUNI, Golden Gate Transit, Samtrans, Vallejo Ferry, Alameda/Oakland Ferry, Caltrain, Greyhound and Amtrak. Each of the agencies will distribute information to riders and staff. In addition, MUNI buses will display placards. Throughout the Labor Day weekend operation, daily updates will be given to the other Bay Area bridges (Golden Gate, San Mateo-Hayward, Dumbarton, Richmond-San Rafael) on traffic and operational progress.

#### 4.16 MTC 511 Coordination

Continued collaboration will occur with MTC staff responsible for the 511 Transit Information System on the upcoming work and the changes to transit schedules, as a result of the closure. MTC incorporates the revised schedule information on their voice-activated system and the MTC 511 (www.511.org) Web site. Furthermore, MTC posts a graphic banner announcing the Bay Bridge construction and closure on the homepage, directing users to BayBridgeInfo.org for information. MTC's informational kiosks will run closure information at San Francisco locations such as the Embarcadero BART Station and the Baycrossings Store at the Ferry Building as additional methods of outreach.

#### 4.17 Department Informational Letter

Caltrans distributes an informational fact sheet electronically to District 4 staff on the upcoming work. The fact sheet includes dates and times of work and the associated closures, as well as transit and driving alternatives.

#### 4.18 Coordination with other Caltrans Districts

Caltrans District 4 will work with other Districts throughout the state to extend the messaging on Changeable Message Signs on key highways. In addition, Caltrans Districts will distribute fact sheets to their staff.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

## 4.19 Building on Past Successes/Streamlining

The successful outreach efforts in the closure years of 2006 and 2007 will lend themselves to efficiency gains for 2009. Reduction in paper costs (printing) and labor (fewer community presentations) are two examples of this.

## SECTION FIVE CALTRANS INTERNAL COORDINATION

## 5.1 Command Center

A Project Specific Command Center equipped with computers, television monitors, workspaces and meeting space has been established for key staff to be able to work on site and coordinate closely together, with the Caltrans Traffic Management Center and externally throughout the closure period. Leading up to the closure, Caltrans, partner agencies and community stakeholders will meet regularly to review ongoing issues relating to the project. The combination of advanced preparation, meeting space, equipment, and key internal and external staff creates an "information hub" for the operation and will serve as the home base for all key players.

## 5.2 District 4 Coordination

#### **Public Affairs Office**

The Bay Bridge Public Information staff will communicate regularly with the District 4 Public Affairs staff to help ensure that District staff stay informed and to identify potential areas for collaboration.

#### District Director's Office

Presentations on the public outreach strategy and implementation elements will be made to the District Director and his staff, as directed.

#### **Traffic Operations**

Caltrans holds intermittent meetings for key District operations staff on all of the projects along the Bay Bridge Corridor. The Traffic Management Center addresses the anticipated needs of the operation by joining the Command Center and by assisting on the public outreach effort through the operational elements, such as Changeable Message Signs.

## 5.3 Agency and Executive Staff

The TBPOC agencies will be given a presentation on the scope and impacts of the work prior to the beginning of the work. The TBPOC will review the Outreach Action Plan in April 2009. Caltrans Headquarters (Lane Closure Review Committee) will be briefed in April 2009, as well. Regular communications and updates regarding the public outreach strategy and its implementation will be made to the Public Affairs Office, the Caltrans Director and Director's staff, as directed.

#### DRAFT STAKEHOLDER AND MEDIA OUTREACH ACTION PLAN

## SECTION SIX PROPOSED PRESENTATION CALENDAR

April 2009 POC Approval of Outreach Plan

District Executive Staff Presentation

Caltrans Lane Closure Review Committee Presentation

**Elected Officials Legislative Outreach Meetings** 

**BATA Commission Presentation** 

Media Outreach Meeting

Key Stakeholder Contact: Including TIDA, CCSF, SF Giants, Oakland A's, UC Berkeley Football, Oakland Art & Soul Festival,

The Golden Gate Bridge, The Cities of Hayward, Marin, Larkspur, San Rafael, and County Transportation Authorities)

Transit Agency Coordination Begins External Web site strategy planning

May 2009 Telephone Hotline

June - July 2009 Web Site Updates

E-Alert and flyers to Bay Bridge contacts, including Treasure Island/YBI residents, taxis and shuttle services, airports, hotels, car rental agencies, visitor's bureaus, Chambers of Commerce, hospitals, major employers, entertainment venues, city and

county governments, transit, and tourism agencies

Transit Ridership Outreach MTC/511 Coordination

Caltrans Employee Notification

August 2009 Public Service Announcements and Online Campaigns Begin

E-Alert to Elected Officials

Reminder E-Alert to Bay Bridge Contacts

**Banners Posted** 

Electronic Message Signs and HAR Begin

Media Advisory

Labor Day Weekend 2009 Weekend Site Access for Media

PIO Live Updates

Press Release Announcing Re-opening of Bay Bridge



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Program Management Team

RE: Agenda No. - 4c1a

San Francisco-Oakland Bay Bridge Updates

Self-Anchored Suspension (SAS) Superstructure

TBPOC / ABF Mitigation and Acceleration Update

## **Recommendation:**

For Information Only

## **Cost:**

N/A

## **Schedule Impacts:**

N/A

## Discussion:

On April 2, the PMT will lead a discussion with the TBPOC, as a follow-up to the TBPOC / ABF conference call on March 20, pending any updated material from ABF.

## Attachment(s):

N/A



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4c1a

San Francisco-Oakland Bay Bridge Updates
Self-Anchored Suspension (SAS) Superstructure

TY Lin / Moffatt & Nichol Process Enhancement Proposal

## **Recommendation:**

For Information Only

#### **Cost:**

N/A

## **Schedule Impacts:**

N/A

## **Discussion:**

On April 2, representatives from the TY Lin / Moffat Nichol JV will present their Process Enhancement Proposal to the TBPOC, as it relates to the SAS contract.

## Attachment(s):

N/A



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Dina Noel, Assistant Deputy Director, CTC

RE: Agenda No. - 4c2

Item- San Francisco-Oakland Bay Bridge Updates

Self-Anchored Suspension (SAS) Superstructure

Contract Change Order 108 (Fabrication Schedule Recovery)

#### **Recommendation:**

**APPROVAL** 

## **Cost:**

CCO 108 - \$13,000,000

## **Schedule Impacts:**

CCO 108 Fabrication Schedule Recovery provides compensation for ZPMC if they meet revised shipment dates. Possible schedule recovery is as much as 6 months.

#### **Discussion:**

This Contract Change Order was discussed at the TBPOC partnering meeting/ workshop with the AB/F JV Board on December 11, 2008. At that time it was agreed that this CCO would be executed to compensate American Bridge / Flour for 50% of the incentive package that AB/F had worked out with ZPMC. The attached CCO for \$13,000,000 is the State's share of the incentive package.

#### Attachment(s):

- 1. Draft CCO 108 Memorandum
- 2. Draft CCO 108
- 3. CCO 108 Issue and Approve dated 3/12/2009
- 4. SAS Superstructure Contract 04-0120F4, Budget Analysis, December 31, 2008

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER MEMORANDUM

#### FILE: E.A. 04 - 0120F4 TO: Pete Siegenthaler, Prin. TE / Gary Pursell, P.E., Sup T.E. CO-RTE-PM SF-80-13.2/13.9 FROM: Gary Pursell, P.E., Sup.T.E. FED. NO. CCO#: SUPPLEMENT#: Category Code: BZZZ CONTINGENCY BALANCE (incl. this change) 108 \$101,946,506.40 INCREASE ✓ DECREASE COST: HEADQUARTERS APPROVAL REQUIRED? ✓ YES \$13,000,000.00 ☐ NO IS THIS REQUEST IN ACCORDANCE WITH ✓ YES ☐ NO SUPPLEMENTAL FUNDS PROVIDED: \$0.00 **ENVIRONMENTAL DOCUMENTS?**

PROJECT DESCRIPTION:

DATE: 3/23/2009

Page 1 of 2

Fabrication Schedule Recovery

Original Contract Time:

Def Day(s)

Time Adj. This Change:

Def Day(s)

Time Adj. This Change:

Def Day(s)

CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE

Percentage Time Adjusted: (including this change)

Percentage Time Adjusted: (including this change)

Total # of Unreconciled Deferred Time CCO(s): (including this change)

Total # of Unreconciled Deferred Time CCO(s): (including this change)

Total # of Unreconciled Deferred Time CCO(s): (including this change)

#### THIS CHANGE ORDER PROVIDES FOR:

CCO DESCRIPTION:

Providing schedule recovery incentives and disincentives to ABFJV fabricator ZPMC for meeting specified OBG and Tower item shipment dates. The Department and Contractor will share equally in the cost of all incentive compensation made pursuant to the ABF/ZPMC agreement.

In order to recover from OBG and Tower fabrication schedule slippage, the TBOPC and ABFJV have agreed to provide incentives and disincentives to ABFJV's fabricator, ZPMC. This change provides additional compensation (incentive) to ABFJV's fabricator ZPMC for shipping specified OBG and Tower items on specified dates and reduces compensation (disincentive) for every day items are not shipped. Dates and terms are specified in ABFJV's supply agreement change order with ZPMC, which is included as an attachment to the change order.

In a December 11, 2008, meeting/workshop between TBPOC and ABFJV Board, the TBPOC agreed with ABFJV to participate equally in their proposed incentive/disincentive agreement with ZPMC and directed the Department to proceed accordingly. The incentives and disincentives provided in this change will reduce the risk of fabrication delays affecting the project's critical path. TBPOC and the Department agree that it is in the project's best interest for the Department to participate equally with the Contractor in this change. This change is consistent with the Toll Bridge Program management's objective to implement measures that reduce schedule risk. Maximum Department participation is estimated to be \$13 million, which includes all applicable sales and duty taxes, provided the fabricator achieves the maximum incentive on a majority of shipments.

This work is not covered by contract items. Therefore, payment for this work will be at Adjustment of Compensation at Force Account for an estimated cost of \$13,000,000.00, which can be financed from the contingency fund. A detailed cost analysis is on file.

Adjustment of contract time is deferred pending completion of the work specified in this change as it may affect the controlling operation.

This change order has concurrence from Gary Pursell (Resident Engineer), Rick Morrow (Structure Rep.), Ken Terpstra (Project Manager), Pete Siegenthaler (Principal Engineer), Mike Forner (Principal Engineer). Design and Maintenance concurrences are not required for this change. Formal TBPOC approval is being obtained.

The Resident Engineer requests an Issue and Approve (I&A) from the Division of Construction for this change.

EA: 0120F4

CCO: 108 - 0

DATE: 3/23/2009

Page 2 of 2

CONCURRED BY:					ESTIMATE OF COST	•		
Construction Engineer:	Res. Eng., Gary Pursell, Sup. TE	Date	3/9/09		THIS REQUEST	TOTAL TO DATE		
Bridge Engineer:	Struct Rep, Rick Morrow, Sup TE	Date	3/9/09	ITEMS	\$0.00	\$0.00		
	Ciract Nep, Michigan Way 12		0/0/00	FORCE ACCOUNT	\$0.00	\$0.00		
Project Engineer:		Date		AGREED PRICE	\$0.00	\$0.00		
Project Manager:	Proj Manager, Ken Terpstra	Date	3/9/09	ADJUSTMENT	\$13,000,000.00	\$13,000,000.00		
FHWA Rep.:		Date		TOTAL	\$13,000,000.00	\$13,000,000.00		
Environmental:	HQ, Rich Foley	Date	3/9/09	FEDERAL PARTICIPATION				
				PARTICIPATING	PARTICIPATING IN	I PART NONE		
Other (specify):	PCE, Mike Forner, Prin TE	Date	3/9/09	NON-PARTICIPATIN	IG (MAINTENANCE)	NON-PARTICIPATING		
Other (specify):		Date		FEDERAL SEGREGATION	N (if more than one Fun	ding Source or P.I.P. type)		
District Prior Approval By	<i>y</i> :	Date		CCO FUNDED PER C	,	CCO FUNDED AS FOLLOWS		
HQ (Issue Approve) By:		Date		FEDERAL FUNDING S	SOURCE	PERCENT		
Resident Engineer's Sign	Resident Engineer's Signature Date							
Long	rusel :	3/23	3/09					

#### CONTRACT CHANGE ORDER

Suppl. No. 0

CCO: 108

To:

Change Requested by:

FED. AID LOC .:

Engineer

Contract No. 04 - 0120F4

AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENT You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. NOTE: This change order is not effective until approved by the Engineer.

Road SF-80-13.2/13.9

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

#### Adjustment of Compensation at Force Account:

Provide incentive compensation for meeting specified shipment dates for OBG and Tower shipments 1 through 8 as specified in attached ABFJV Supply Agreement Change Order No. 24 with ZPMC. The Department and the Contractor will share equally in the cost of all compensation made pursuant to the attached agreement, including applicable taxes and excluding markups. Compensation is defined as the incentive less any applicable disincentives as outlined in the attached agreement.

Labor, equipment and material approved by the Engineer, as necessary will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions excluding markups.

Consideration of a time adjustment regarding Extra Work at Force Account will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

Estimated Cost of Adjustment of Compensation at Force Account ......\$13,000,000.00

	Estimated Cost: Increase 🗹 Decrease 🗆	\$13,000,000.00
By reason of this order the time of completion wi	ill be adjusted as follows: Deferred	
Submitted by		
Signature Jussel	Resident Engineer Gary Pursell, Sup.T.E.	Date 3/23/09
Approval Recommended by		
Signature Muscle	Supervising Transportation Engineer  Gary Pursell, Sup. TE	Date 3/23/09
Engineer Approval by		
Signature	Principal Bridge Enigneer Peter Siegenthaler, Prin. TE	Date

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by		
Signature	(Print name and title)	Date

CONTRACT CHANGE ORDER NO. 108

# CHANGE ORDERET 2 OF 5

Supply Agreement

From:

American Bridge/Fluor A Joint Venture

375 Burma Road Oakland, CA 94607

Change Order #: 024 Date: December 04, 2008

Job #: 660110

To:

Zhenhua Port Machinery Company, Ltd.

3470 Pudong Nanlu Shanghai, China, 200125 Supply Agreement #: 660110-SA-001

Cost Code: See Table 2 G/L Code: 5100

Project:

Owner Contract 04-0120F4/04-SF-80-13.2/13.9

San Francisco Oakland Bay Bridge / East Span Seismic Retrofit Project / Self-Anchored Suspension Bridge

Ref. Documents: See Below

You are hereby authorized to make the following change in the above referenced Supply Agreement for the above referenced Project, it being understood that all other terms and conditions of the Supply Agreement shall remain unchanged.

#### DESCRIPTION OF CHANGE:

#### SHIPMENT DATES:

Article 3, Date Required, Item A is removed and replaced as follows:

A. Supplier shall perform all work and deliver the Bid Items hereunder to the Delivery Point according to the following Dates Required for delivery:

Tower including attached struts, crossbraces and splice plates:

Tower Bases including diaphragms and shear plates by 20th of September 2009

Tower 2<sup>nd</sup> Tier by 20<sup>th</sup> of January 2010 Tower 3<sup>rd</sup> Tier by 20<sup>th</sup> of March 2010 Tower 4<sup>th</sup> Tier by 20<sup>th</sup> of May 2010

Tower saddle grillage/base plate by 20th of May 2010

Tower heads, tower skirts, extra tower struts by 20th of June 2010 latest

Box Girders including east and west roadways, attaching splice plates and crossbeams, progressing from Pier W2 to Pier E2:

Lifts 1 to 4 by 15th of May 2009

Lifts 5 to 6 by 15<sup>th</sup> of July 2009 Lifts 7 to 8 by 20<sup>th</sup> of November 2009

Lifts 9 to 10 by 20<sup>th</sup> of January 2010 Lifts 11 to 12 by 20<sup>th</sup> of March 2010 Lifts 13 to 14 by 20<sup>th</sup> of May 2010

Bike Path and all other components by 20th of June 2010 latest

Add Item F to Article 3 as follows: For purposes of determining liquidated damages, if any, payable by Supplier to Contractor, Supplier shall receive a grace period, not to exceed sixty (60) days, added to the Dates, set forth in Article 3 A, other than the aforementioned sixty (60) day grace period for purposes of calculating liquidated damages only, the parties agree and ratify that Article 16, Liquidated and Actual Delay Damages, Schedule B, Additional Terms and Condition of the Supply Agreement remains in full force and effect.

CONTRACT NO. 04-0120+4

CONTRACT CHANGE ORDER NO. 108

# CHANGE ORDER SHEET 3 OF 5

Supply Agreement

From:

American Bridge/Fluor A Joint Venture

375 Burma Road Oakland, CA 94607 Change Order #: 024 Date: December 04, 2008

Job #: 660110

To:

Zhenhua Port Machinery Company, Ltd.

3470 Pudong Nanlu Shanghai, China, 200125 Supply Agreement #: 660110-SA-001

Cost Code: See Table 2

G/L Code: 5100

Project:

Owner Contract 04-0120F4/04-SF-80-13.2/13.9

San Francisco Oakland Bay Bridge / East Span Seismic Retrofit Project / Self-Anchored Suspension Bridge

The Supplier shall accelerate the delivery of the following eight shipments:

TABLE 1: INCENTIVE-DISINCENTIVE SHIPMENT DATES

Shipment Number	1	2	3	4	5	6	7	8
Components	OBG1-4	OBG 5&6	Tower Lift	OBG 7&8	OBG 9&10, Tower Lift 2	OBG 11&12, Tower Lift 3	OBG 13&14, Tower Lifts 4&5	OBG Misc.
Shipment Date (Departure from Supplier's facility)	15-Apr-09	15-Jun-09	20-Aug-09	20-Oct-09	20-Dec-09	20-Feb-10	20-Apr-10	20-May-10

#### INCENTIVE-DISINCENTIVE PLAN:

Based on the above schedule the first four (4) shipments will have an assigned incentive value as follows:

TABLE 2: INCENTIVE TABLE 1

Shipment Number	Maximum Incentive 1)	Disincentive	Incentive Expiration Date <sup>2)</sup>	Cost Code		
1: OBG 1-4	\$ 3,000,000	\$ 75,000 per day	25-May-2009	0500320		
2: OBG 5&6	\$ 1,000,000	\$ 30,000 per day	18-July-2009	0500320		
3: Tower Lift 1	\$ 4,000,000	\$ 75,000 per day	12-Oct-2009	0500220		
4: OBG 7&8	\$ 2,000,000	\$ 60,000 per day	22-Nov-2009	0500320		
4: (Alternate)	\$ 6,000,000	\$100,000 per day	19-Dec-2009	0500220 & 0500320		
OBG 7 & 8 & Tower Lift 2						

Note 1: Maximum Incentive earned when each Shipment Date, provided in TABLE 1 above, calculated in accordance with this Change Order, is achieved.

## CLARIFICATIONS AND CONDITIONS:

- 1. In the event Supplier achieves the Shipment Date for each Shipment Number, 1-8, set forth in TABLE 1 above, the Contractor will pay Supplier a Maximum Incentive amount of \$24 million.
- 2. The parties acknowledge and agree, except Owner issued Contract Change Orders or any dispute between Supplier and Owner presented through Contractor, any and all direct and indirect claims originating on or before December 12, 2008, with the exception of those caused by the Owner, by Supplier against the Contractor for equitable price adjustment of Supply Agreement #660110-SA-001, are hereby fully satisfied and discharged.

CONTRACT NO. 04-0120 P4

-CONTRACT CHANGE ORDER NO. 108

CHANGE ORDER SHEET 4 OF 5

Supply Agreement

From:

American Bridge/Fluor A Joint Venture

375 Burma Road Oakland, CA 94607 Change Order #: 024

Date: December 04, 2008

Job #: 660110

To:

Zhenhua Port Machinery Company, Ltd.

3470 Pudong Nanlu Shanghai, China, 200125 Supply Agreement #: 660110-SA-001

Cost Code: See Table 2

G/L Code: 5100

Project:

Owner Contract 04-0120F4/04-SF-80-13.2/13.9

San Francisco Oakland Bay Bridge / East Span Seismic Retrofit Project / Self-Anchored Suspension Bridge

- 3. In the event the Supplier ships Tower Lift 2 in Shipment Number 4, instead of its scheduled Shipment Number 5 Contractor will treble the Shipment Number 4, earned incentive, calculated in accordance with this Change Order.
- 4. In the event Supplier ships Tower Lift 2 in Shipment Number 4, instead of its scheduled Shipment Number 5, the total Maximum Incentive amount for Shipments 1-4 shall be increased from \$10 million to \$14 million and the remaining Maximum Incentive amount achievable by Supplier for accelerating the Shipment Dates for Shipment Numbers 5-8 shall be reduced from \$14 million to \$10 million.
- 5. Allocation of the remaining Maximum Incentive available for Shipment Numbers 5 -8 shall be agreed by the parties.
- 6. The Incentive-Disincentive Shipment Dates, sequence and Tower Lift components, including attaching struts, crossbraces and splice plates, and Box Girder (OBG) components including east and west roadways, attaching splice plates and crossbeams, progressing from Pier W2 to Pier E2 shall remain as indicated in TABLE 1, unless approved in writing by Contractor
- 7. Supplier shall maintain at a minimum, a 30-day period between each Shipment Date unless a change is approved in writing by the Contractor.
- 8. The Shipment Dates provided in TABLE 1 are the departure dates from Supplier's facility for each Shipment Number. Nothing contained in this Change Order shall relieve the Supplier of the obligation for the delivery of the Shipments to the Delivery Point under Ocean Freight (Incoterms 2000 DES).
- 9. For each Shipment Number, the Contractor shall allow 28 days for ocean travel to the Delivery Point. For every day in excess of 28 days, the Maximum Incentive stipulated in TABLE 1 for the applicable Shipment Number will be reduced by applicable Disincentive amount.
- 10. For Shipment Numbers 1-8, the Maximum Incentive achievable by Supplier under this Change Order is \$ 24,000,000.00. PAYMENT TERMS:
- Contractor shall pay Supplier an advance payment of \$ 1,500,000.00 upon execution of this Change Order.
- The advance payment shall be repaid to Contractor by deducting the amount of the advance payment from Shipment Numbers 5-8 incentive payments, as agreed by the parties. In the event the incentive payments due Supplier for Shipment Numbers 5-8 are insufficient to repay Contractor the advance payment, the Supply Agreement Total Price shall be reduced in the amount of the value of the outstanding advance payment.
- Payment by Contractor of the earned incentive for each Shipment Number shall be paid 30 days after departure from Supplier's facility, but in no event shall the payment be due and owing earlier than the arrival of the corresponding Shipment Number at the Delivery Point.

CONTRACT NO..

CONTRACT CHANGE ORDER NO. \_

## SHEET 5 OF 5 CHANGE ORI

Supply Agreement

From:

American Bridge/Fluor A Joint Venture

375 Burma Road

Oakland, CA 94607

Change Order #: 024

Date: December 04, 2008

Job #: 660110

To:

Zhenhua Port Machinery Company, Ltd.

3470 Pudong Nanlu Shanghai, China, 200125 Supply Agreement #: 660110-SA-001

Cost Code: See Table 2

G/L Code: 5100

Project:

Owner Contract 04-0120F4/04-SF-80-13.2/13.9

San Francisco Oakland Bay Bridge / East Span Seismic Retrofit Project / Self-Anchored Suspension Bridge

Work paid on basis of Lump Sum

If work is to be done on unit price basis, quantities shown are approximate and payment will be made for actual quantities as determined under the Prime Contract.

Estimated Start Date:

See above Price This Change (not to exceed):

\$ 24,000,000.00

Estimated Completion Date:

See above Original Price:

\$ 194,298,697.00

Increase (Decrease) in Contract Time:

See above Total Previous Change Orders:

10,104,723.01

Revised Total Price:

\$ 228,403,420.01

Originated by:

Peter van der Waart van Gulik

The Supplier accepts all terms and conditions for this change order and waives the right to any additional claims for extra compensation or schedule changes not listed above which pertain to work covered by this change order. It is further understood and agreed by Supplier that this adjustment constitutes full compensation for all costs and markup directly or indirectly attributable to or resulting from the change ordered, for all delays directly or indirectly related thereto or resulting therefrom, and for performance of the change within the time frame stated.

Michael D. Flowers, P.E.

Project Director

1.19.09

Title

Date

Supplier shall sign and return four (4) originals for execution by American Bridge/Fluor. American Bridge/Fluor will return one (1) final executed original to Supplier.



## CONSTRUCTION DIVISION

## TO: District 4 CCO Desk

Date: 3/12/2009

**Contract No.:** 4 - 0120F4

Road: SF-80-13.2/13.9

FED. No.: NONE

To: SARTIPI - 04

Attention: 04 - ALVAREZ

HQ Direction: TO ISSUE AND APPROVE

**CCO No.** 108 **Sup. No.** 0 **Rev. No.** 1

Per Your Submittal Dated: 3/11/2009 CCO Category Code: B - Z - Z - Z

SCHEDULE RECOVERY INCENTIVES AND DISINCENTIVES TO ABFJV FABRICATOR ZPMC FOR MEETING SPECIFIED OBG AND TOWER ITEM SHIPMENT DATES. THE DEPARTMENT AND THE CONTRACTOR WILL SHARE THE COST OF INCENTIVE COMPENSATION EQUALLY.

#### NOTES:

- 1) ACCORDING TO DISTRICT 04 TOLL BRIDGE, AN EXTRA \$1M (TO COVER FOR APPLICABLE SALES AND DUTY TAXES) IS ADDED ON TOP OF THE STATE'S \$12M SHARE FOR INCENTIVES TO MEET SHIPMENT DATES.
- 2) I&A IS CONTINGENT ON OBTAINING TBPOC'S FORMAL AUTHORIZATION TO APPROVE THIS CHANGE SINCE THE AMOUNT EXCEEDS \$1M.

TOTAL COST FOR THIS CHANGE IS SHOWN AS \$13,000,000.00 WITH NO TIME ADJUSTMENT.

Items: \$0.00

Force Account: \$13,000,000.00

Agreed Price: \$0.00

Adj. of Comp. \$0.00

Total: \$13,000,000.00

Time: (NONE)

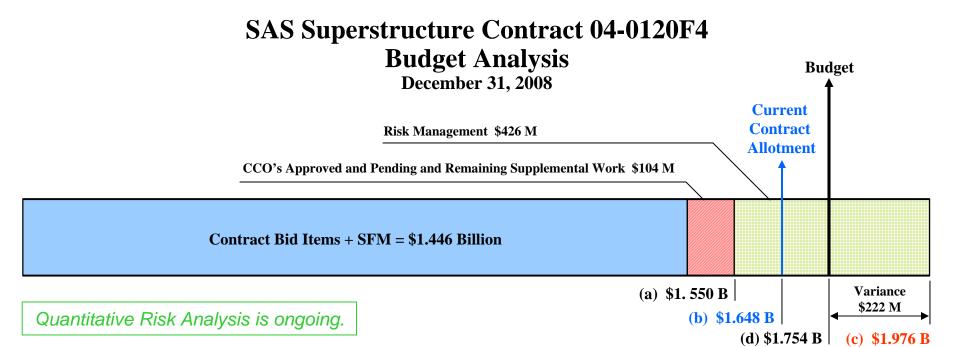
SCOTT JARVIS, Acting Assistant Division Chief, by:

Bob Molera

Division of Construction 1120 "N" Street, MS-44, Sacramento, CA 95814 Fax Number: (916) 654-5735 To Confirm Transmission, Call (916) 654-2735

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Form Revised: 1/7/05 1:42:44 PM



## Contract 04-0120F4 SAS Superstructure Current Contract Budget Funding Status

December 31, 2008 Basis

## Contract 04-0120F4 SAS Superstructure Contract Forecast At Completion (FAC) & Variance

December 31, 2008 Basis

		<u> </u>			
Contract Bid Items	\$	1,434,085,935	Contract Bid Items		\$ 1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475	State Furnished Materials (SFM)		\$ 12,473,475
Subtotal	\$	1,446,559,410		Subtotal	\$ 1,446,559,410
Supplemental Work	\$	52,418,000	Supplemental Work Remaining		\$ 52,418,000
Contingency at 10%	\$	148,652,590	CCO's		
Subtotal Original Contract Allotment	\$	1,647,630,000	CCO's (Approved $(52)$ + Pending $(70)$ = Total $(122)$ )		\$ 37,604,226
Supplemental Budget Allocation Approved	\$	-	CCO's = or > \$1Million Pending POC's approval (3)		\$ 13,796,000
Subtotal Current Contract Allotment	\$	1,647,630,000 (b)		Subtotal	\$ 1,550,377,636 (a)
Remaining Unallotted Budget	\$	106,070,000			
(Current Contract Budget - Current Contract Allotmen	t)		Risk Management Cost - Q3 2008 50% Probable		\$ 425,300,000
				=	 
Total Current Contract Budget	\$	1,753,700,000 ( <b>d</b> )		Total	\$ 1,975,677,636 <b>(c)</b>
Reported Total Forecast At Completion		\$1,767,400,000	Variance (Total - Current Budget)		\$ 221,977,636
In 3rd Quarter 2008 TBSRP Report					

Confidential Draft – For Deliberative Purpose Only



TO: Toll Bridge Program Oversight Committee DATE: March 25, 2009

(TBPOC)

FR: Andrew Fremier, BATA

**RE:** Agenda No. - 5a

Other Business

Item- SFOBB West Span Pathway PSR

#### **Recommendation:**

For Information Only

Cost:

N/A

## **Schedule Impacts:**

N/A

#### Discussion

In 2001, Caltrans and BATA completed a comprehensive feasibility study to add a pedestrian/bicycle/maintenance pathway to the west span of the San Francisco-Oakland Bay Bridge. That study determined several feasible options to add a pathway along both sides of the west span.

To advance the project, BATA will be issuing a task order with TY Lin under a BATA oncall engineering contract to develop a project study report that will be based heavily on the feasibility study and updated based on current developments and needs. The study will be funded from BATA Toll Bridge Rehabilitation Program funds. BATA will be meeting with Caltrans Toll Bridge and District management to determine the appropriate oversight and staffing structure for the study.

The estimated cost of the task order is \$1.5 million.

#### Attachment(s):

N/A